

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN JOSE DIVISION

HTC CORPORATION AND HTC ) C-08-00882 PSG  
AMERICA, INC., )  
 ) SAN JOSE, CALIFORNIA  
PLAINTIFF, )  
 ) SEPTEMBER 23, 2013  
VS. )  
 ) VOLUME 1  
TECHNOLOGY PROPERTIES LIMITED, )  
PATRIOT SCIENTIFIC CORPORATION ) PAGES 1-226  
AND ALLIACENSE LIMITED, )  
 )  
DEFENDANT. )  
\_\_\_\_\_ )

TRANSCRIPT OF PROCEEDINGS  
BEFORE THE HONORABLE PAUL S. GREWAL  
UNITED STATES MAGISTRATE JUDGE

A P P E A R A N C E S:

FOR THE PLAINTIFF: COOLEY LLP  
BY: HEIDI KEEFE  
RON LEMIEUX  
3175 HANOVER STREET  
PALO ALTO, CALIFORNIA 94304

APPEARANCES CONTINUED ON NEXT PAGE

OFFICIAL COURT REPORTER: LEE-ANNE SHORTRIDGE, CSR, CRR  
CERTIFICATE NUMBER 9595

PROCEEDINGS RECORDED BY MECHANICAL STENOGRAPHY  
TRANSCRIPT PRODUCED WITH COMPUTER

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APPEARANCES (CONTINUED)

FOR THE PLAINTIFF: COOLEY LLP  
BY: STEPHEN R. SMITH  
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SUITE 700  
WASHINGTON, D.C. 20004

BY: MATTHEW J. LEARY  
380 INTERLOCKEN CRESCENT, SUITE 900  
BROOMFIELD, COLORADO 80021

ALSO PRESENT: VINCENT LAM

FOR DEFENDANTS TPL AND  
ALLIACENSE: AGILITY IP LAW  
BY: JAMES C. OTTESON  
IRVIN E. TYAN  
THOMAS T. CARMACK  
VINCENT K. YEE  
DAVID LANSKY  
149 COMMONWEALTH DRIVE  
MENLO PARK, CALIFORNIA 94025

FOR DEFENDANT PATRIOT: KIRBY, NOONAN, LANCE & HOGE  
CHARLES T. HOGE  
35 TENTH AVENUE  
SAN DIEGO, CALIFORNIA 92101

ALSO PRESENT: CHARLES MOORE  
CLIFFORD FLOWERS  
DAN LECKRONE  
MACK LECKRONE

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INDEX OF PROCEEDINGS

OPENING STATEMENT BY MR. OTTESON P. 146

OPENING STATEMENT BY MR. SMITH P. 185

INDEX OF WITNESSES

DEFENDANTS '

**CHARLES MOORE**

DIRECT EXAM BY MR. OTTESON P. 203

1 SAN JOSE, CALIFORNIA

SEPTEMBER 23, 2013

2 P R O C E E D I N G S

3 (COURT CONVENED AND THE FOLLOWING PROCEEDINGS WERE HELD:)

4 THE COURT: MR. RIVERA, WOULD YOU CALL THE MATTER  
5 THAT'S BEEN SET FOR TRIAL?

6 THE CLERK: YES, YOUR HONOR. CALLING HTC  
7 CORPORATION, ET AL, VERSUS TECHNOLOGY PROPERTIES LIMITED, ET  
8 AL, CASE NUMBER CV-08-882 PSG.

9 COUNSEL, PLEASE STATE YOUR APPEARANCES.

10 MR. OTTESON: YOUR HONOR, JIM OTTESON OF AGILITY IP  
11 LAW APPEARING FOR THE DEFENDANTS TPL AND ALLIACENSE. I'M  
12 JOINED BY SEVERAL COLLEAGUES FROM MY FIRM, TOM CARMACK,  
13 DAVID LANSKY, PHIL MARSH, AND A COUPLE OF OTHERS IN THE BACK.

14 THE COURT: ALL RIGHT. GOOD MORNING, MR. OTTESON.

15 MR. OTTESON: GOOD MORNING.

16 MR. HOGE: GOOD MORNING, CHARLIE HOGE FOR PATRIOT  
17 SCIENTIFIC, AND CLIFFORD FLOWERS IS THE PATRIOT'S CEO.

18 THE COURT: GOOD MORNING, SIR.

19 MR. OTTESON: I SHOULD ALSO POINT OUT THAT WE'RE  
20 JOINED BY CHARLES MOORE, THE INVENTOR OF THE '336 PATENT.

21 THE COURT: MR. MOORE, GOOD MORNING, SIR.

22 MS. KEEFE: GOOD MORNING, YOUR HONOR. HEIDI KEEFE  
23 FROM COOLEY REPRESENTING HTC, AND WITH ME ARE STEVE SMITH,  
24 RON LEMIEUX, AND MATT LEARY.

25 THE COURT: MS. KEEFE, GOOD MORNING TO YOU AND EACH

1 OF YOUR COLLEAGUES AS WELL.

2 MS. KEEFE: GOOD MORNING.

3 THE COURT: ALL RIGHT. WHY DON'T WE GET STARTED WITH  
4 SOME HOUSEKEEPING MATTERS.

5 FIRST AND FOREMOST, YOU MAY HAVE NOT YET SEEN IT, BUT I  
6 HAVE ISSUED ORDERS ON AT LEAST TWO OF THE MATTERS THAT WERE  
7 PENDING AS OF 8:45 THIS MORNING, SO THE DOCKET HAS THOSE ORDERS  
8 POSTED.

9 ONE ITEM WHICH REMAINS OUTSTANDING IS THIS MOTION,  
10 EMERGENCY MOTION FOR A LIMITING INSTRUCTION WHICH WAS BROUGHT  
11 BY THE DEFENDANTS.

12 SO MR. OTTESON, YOU WANT TO SPEAK TO THAT?

13 MR. OTTESON: WE'RE NOT GOING TO OPPOSE THAT, YOUR  
14 HONOR.

15 THE COURT: OKAY.

16 MR. CARMACK: NO, THAT'S OURS.

17 THE COURT: IT'S YOUR MOTION.

18 MR. OTTESON: MR. CARMACK WILL ADDRESS THAT.

19 THE COURT: WHY DON'T I ASK MR. CARMACK?

20 MR. CARMACK: SO I THINK THE ONLY SENTENCE IN DISPUTE  
21 IS THE LAST SENTENCE OF THE INSTRUCTION, AND HTC CAN SPEAK TO  
22 THEIR ASSENT, BUT I BELIEVE THE ISSUE IS, IN THE LAST SENTENCE,  
23 IT SAYS, "THE PRIOR DISPUTES HAVE BEEN RESOLVED AND THEY SHOULD  
24 IN NO WAY COLOR YOUR PERCEPTION OF ANY PARTY TO THIS CASE."

25 I UNDERSTAND HTC'S OBJECTION TO THAT SENTENCE IS THAT IT

1 MAKES A FACTUAL REPRESENTATION THAT THEY HAVEN'T VERIFIED.

2 THE PART OF THE SENTENCE WE'RE CONCERNED WITH IS "THEY  
3 SHOULD IN NO WAY COLOR YOUR PERCEPTION OF ANY PARTY IN THIS  
4 CASE." I MEAN, THE JURY INSTRUCTIONS CONTAIN A LOT OF  
5 DIFFERENT FACTUAL STATEMENTS, INCLUDING WHO THE PARTIES ARE.

6 I THINK THIS ONE IS NON-CONTROVERSIAL. THEY'VE BEEN  
7 PRODUCED COPIES OF SETTLEMENT AGREEMENTS AND THEY KNOW THE  
8 DISPUTES ARE RESOLVED. I JUST DON'T THINK IT'S CONTROVERSIAL.

9 THE COURT: ALL RIGHT.

10 MR. LEARY: YOUR HONOR, I'M MATTHEW LEARY.

11 THE COURT: GO AHEAD, MR. LEARY.

12 MR. LEARY: GOOD MORNING, ON BEHALF OF HTC.

13 YOUR HONOR, WE ARE NOT IN ANY WAY CONVINCED THAT THE  
14 DISPUTES HAVE BEEN RESOLVED. IN FACT, THERE HAVE BEEN  
15 INDICATIONS ON THE RECORD DURING THE DEPOSITION OF ONE OF THE  
16 INVENTORS THAT INDICATE THAT, IN FACT, THE DISPUTES MAY BE  
17 BROUGHT UP AGAIN BY THE INVENTOR AT SOME POINT.

18 IF THIS FACT IS GOING TO BE PROVEN, IT SHOULD BE PROVEN AT  
19 TRIAL AND SHOULDN'T BE PART OF THE JURY INSTRUCTIONS.

20 AS FAR AS THE LAST PART OF THE SENTENCE, THAT THE PRIOR  
21 DISPUTE SHOULD NOT COLOR THE PERCEPTION OF ANY PARTY, THAT LAST  
22 PART OF THE SENTENCE IS REDUNDANT OF THE FIRST PARAGRAPH WHICH  
23 ALREADY INDICATES WHAT THE JURORS CAN DO WITH THIS EVIDENCE.

24 THE COURT: ALL RIGHT. MR. CARMACK, BRIEFLY, GO  
25 AHEAD.

1 MR. CARMACK: JUST ONE SUGGESTION THEN, YOUR HONOR.  
2 THE REASON THAT I DON'T THINK THE LAST SENTENCE IS DUPLICATIVE  
3 OF THE FIRST PARAGRAPH IS BECAUSE THE FIRST PARAGRAPH TALKS  
4 ABOUT THE HYPOTHETICAL NEGOTIATION, SO MY PROPOSAL WOULD BE TO  
5 CHANGE THE LAST SENTENCE TO SAY "THE PRIOR DISPUTES SHOULD IN  
6 NO WAY COLOR YOUR PERCEPTION OF ANY PARTY TO THIS CASE," AND  
7 NOT TALK ABOUT THEM BEING RESOLVED. SO JUST STRIKE "HAVE BEEN  
8 RESOLVED AND THEY."

9 THE COURT: ALL RIGHT.

10 MR. LEARY: YOUR HONOR, THAT'S FINE WITH US.

11 THE COURT: OKAY. WITH THAT, IT APPEARS WE HAVE AN  
12 AGREEMENT. I WILL ISSUE THE INSTRUCTION AS MODIFIED BY  
13 MR. CARMACK IN THE PRECEDING PARAGRAPH OF THE TRANSCRIPT.

14 LET'S MOVE ON TO THE NEXT SET OF ISSUES IF WE COULD.  
15 MR. CARMACK?

16 MR. CARMACK: I WAS GOING TO SAY I UNDERSTAND FROM  
17 YOUR ORDER THAT YOUR HONOR WILL ISSUE THIS INSTRUCTION WHEN THE  
18 NEED ARISES DURING THE TRIAL, AS IN WHEN HTC BRINGS UP THE  
19 DISPUTE BETWEEN THE PARTIES, AND IF THEY DON'T, IT DOESN'T NEED  
20 TO BE OFFERED.

21 THE COURT: WHEN AND IF, THAT'S CORRECT.

22 MS. KEEFE, GO AHEAD.

23 MS. KEEFE: NO, YOUR HONOR. WHAT WE STIPULATED TO IS  
24 THAT IT WOULD BE A LIMITING INSTRUCTION AT THE TIME OF JURY  
25 INSTRUCTIONS, SO AT THE TIME THAT THE JURY IS CHARGED, NOT IN

1 THE MIDDLE OF THE CASE WHEN ALL OF A SUDDEN A WITNESS COMES ON  
2 AND YOU SAY "OH, YOU DON'T HAVE TO LISTEN TO THIS GUY." THAT'S  
3 NOT FAIR. IT'S PREJUDICIAL TO THE FACT OF THE QUESTIONS THAT  
4 ARE COMING OUT. IT'S MEANT TO BE AT THE END.

5 THE COURT: OKAY. I APPRECIATE THE STIPULATION.

6 I'M GOING TO GIVE THE INSTRUCTION AS MODIFIED AFTER THE  
7 EVIDENCE, IF IT HAS BEEN INTRODUCED AT ALL.

8 SO LET'S PROCEED TO WHAT OTHER EVIDENTIARY ISSUES YOU ALL  
9 HAVE, IF ANY.

10 MR. LEARY, WHAT'S FIRST?

11 MR. LEARY: YOUR HONOR, HTC HAS A COUPLE OF DISPUTES  
12 WITH SOME OF THE EXHIBITS THAT WE WERE INFORMED TPL WANTS PUT  
13 INTO THE RECORD TODAY.

14 FIRST, LAST NIGHT, LITERALLY ON THE EVE OF TRIAL, THE  
15 DEFENDANTS TOLD US OF THEIR INTENT TO USE SOME PHYSICAL  
16 EXHIBITS THAT HAVE NEVER BEEN PRODUCED AND NEVER BEEN MADE  
17 AVAILABLE TO HTC.

18 AND, YOU KNOW, DISCOVERY ENDED SIX MONTHS AGO. IT TURNS  
19 OUT THE DEFENDANTS, HOWEVER, HAVE KNOWN THESE PHYSICAL  
20 EXHIBITS, APPARENTLY, SINCE AROUND JANUARY OF THIS YEAR.

21 THE COURT: WHAT ARE WE TALKING ABOUT?

22 MR. LEARY: WE'RE TALKING ABOUT A NUMBER OF WHAT HAVE  
23 BEEN ALLEGED TO BE PROTOTYPES OF THE INVENTION, THE -- IF I CAN  
24 APPROACH, I CAN GIVE YOU A COPY OF PICTURES OF THE, OF THE  
25 EXHIBITS THAT THEY WANT TO ADMIT.



1 THE COURT: WHY DON'T YOU JUST TELL ME WHAT THEY ARE?

2 MR. LEARY: THEY APPEAR TO BE PRINTED CIRCUIT BOARDS  
3 OF WHAT THEY SAY ARE PROTOTYPES OF THE INVENTOR'S INVENTION  
4 FROM THE MID-1990S.

5 THE COURT: SO THESE PCB'S WERE REQUESTED DURING  
6 DISCOVERY?

7 MR. LEARY: THESE WERE DEFINITELY WITHIN THE SCOPE OF  
8 THE DISCOVERY REQUESTS THAT HTC MADE.

9 AND WE ALSO REALIZED LAST NIGHT THAT DURING ONE OF THE  
10 DEPOSITIONS OF I BELIEVE IT WAS INVENTOR CHARLES MOORE, HE  
11 ACTUALLY INDICATED THAT THESE BOARDS MIGHT EXIST. HE SAID, IN  
12 FRONT OF HIS ATTORNEYS BACK IN JANUARY, THAT HE THOUGHT ONE OF  
13 THE PRIOR ATTORNEYS THAT TPL HAD USED HAD THESE EXHIBITS.

14 WE'VE NEVER SEEN THEM. WE LITERALLY HEARD ABOUT THEM LAST  
15 NIGHT.

16 THE COURT: ALL RIGHT. SO OTHER THAN PRINT --  
17 VARIOUS PRINTED CIRCUIT BOARDS WHICH YOU SAY WERE NEVER  
18 PRODUCED IN DISCOVERY, ARE THERE ANY OTHER EXHIBITS THAT WE'RE  
19 TALKING ABOUT HERE?

20 MR. LEARY: YES, THERE'S ONE OTHER EXHIBIT. AND BY  
21 THE WAY, THAT EXHIBIT IS EXHIBIT 1626.

22 WE'RE ALSO OBJECTING TO EXHIBIT 556. EXHIBIT 556 IS A COPY  
23 OF THE 25 MICROPROCESSORS THAT SHOOK THE WORLD. YOUR HONOR MAY  
24 REMEMBER THAT IN YOUR ORDER REGARDING MIL 2, YOU SAID THAT THAT  
25 ARTICLE WOULD BE EXCLUDED IF HTC DID NOT BRING A DEFENSE,

1           INVALIDITY DEFENSE OF OBVIOUSNESS.

2           OF COURSE HTC HAS DROPPED ITS DEFENSE, AND YET, DESPITE  
3           THAT, TPL IS STILL LOOKING TO PUT THAT 25 MICROPROCESSORS  
4           ARTICLE INTO THE RECORD.

5           THE COURT: ALL RIGHT. LET ME HEAR FROM MR. OTTESON.  
6           DO YOU WANT TO SPEAK TO THIS OR ONE OF YOUR COLLEAGUES?

7           MR. OTTESON: THANK YOU, YOUR HONOR, YES.

8           SO I THINK IT'S A MISCHARACTERIZATION, TO SAY THE VERY  
9           LEAST, THAT THESE WERE NOT AVAILABLE BECAUSE THEY KNEW FROM  
10          MR. MOORE'S DEPOSITION IN JANUARY THAT THEY MIGHT EXIST WITH  
11          PRIOR COUNSEL. AND THIS IS, LIKE, TWO OR THREE SETS OF LAWYERS  
12          AGO.

13          WE -- WE HAD NO IDEA THAT WE COULD ACTUALLY GET THEM UNTIL  
14          TOWNSEND BASICALLY MINED THE BOWELS OF ITS ARCHIVES AND WAS  
15          ABLE TO FIND THEM.

16          BUT THERE'S ABSOLUTELY NO PREJUDICE. IF YOU LOOK AT --  
17          I'M SORRY, MATT, IF I COULD JUST BORROW THAT.

18          MR. LEARY: SURE.

19          MR. OTTESON: AND ACTUALLY HE GOT THE EXHIBIT NUMBERS  
20          MIXED UP. 556 IS THE ACTUAL PHOTOGRAPHS OF THE, OF THE BOARDS  
21          THAT WE'RE TALKING ABOUT.

22          SO THESE WERE PRODUCED IN DISCOVERY AND THEY HAD THESE AND  
23          ACTUALLY EXAMINED MR. MOORE ABOUT THEM IN DEPOSITION.

24          SO THE BOARDS ARE NOT EVEN OPERATIONAL. I'VE GOT THEM  
25          RIGHT HERE. THEY DON'T -- THEY DON'T WORK ANYMORE AND THEY'RE

1 THE VERY BOARDS THAT WERE PHOTOGRAPHED HERE, SO THERE'S  
2 ABSOLUTELY NO PREJUDICE TO THEM.

3 THE COURT: WERE THE PHOTOGRAPHS OF THE BOARDS MADE  
4 AVAILABLE TO THEM DURING DISCOVERY?

5 MR. OTTESON: ABSOLUTELY. HE WAS EXAMINED IN HIS  
6 DEPOSITION IN JANUARY ON THE PHOTOGRAPHS. WE JUST DIDN'T KNOW  
7 IF IT WAS EVEN POSSIBLE TO GET THESE UNTIL LITERALLY A FEW DAYS  
8 AGO.

9 THERE'S ALSO A PHOTOGRAPH IN EXHIBIT 556 OF THIS LITTLE  
10 FOLIO OF CHIPS THAT MR. MOORE DESIGNED. IT'S RIGHT HERE. YOU  
11 CAN SEE THAT IT'S EXACTLY THE SAME.

12 SO, AGAIN, THIS IS SOMETHING THAT THEY'VE HAD IN  
13 DISCOVERY. FOR THEM TO SAY THAT THEY'VE SUFFERED PREJUDICE IS  
14 NOT TRUE AT ALL. THERE IS NO PREJUDICE AT ALL.

15 SO -- AND THESE ARE SIMPLY DEMONSTRATIVES. WE DON'T WANT  
16 TO ENTER THESE AS EXHIBITS INTO THE EVIDENCE. THEY'RE JUST  
17 SOMETHING THAT MR. MOORE ACTUALLY CREATED AND HE CAN TESTIFY  
18 AND SHOW THEM AND THAT'S BASICALLY IT FOR THE BOARDS.

19 SO WITH RESPECT TO THE 25 MICROCHIPS THAT SHOOK THE WORLD,  
20 AS I UNDERSTAND YOUR HONOR'S RULING ON THE MOTION IN LIMINE, WE  
21 WOULD NOT BE PERMITTED TO USE THAT UNLESS THEY WERE RUNNING AN  
22 INVALIDITY OR OBVIOUSNESS DEFENSE, WHICH NOW THEY'VE DROPPED.

23 HOWEVER, I DON'T REALLY SEE THE PREJUDICE OF THAT, EITHER.  
24 I MEAN, THEY SAY IT'S HEARSAY.

25 BUT WE'RE NOT OFFERING IT FOR THE TRUTH OF WHAT IS SAID

1 THERE. WE'RE JUST OFFERING IT TO SHOW THAT THERE WAS SOME  
2 RECOGNITION FOR THE CHIP AT ISSUE.

3 THE COURT: OKAY. LET ME FIRST CONFIRM WHICH EXHIBIT  
4 NUMBER APPLIES TO WHICH EXHIBITS.

5 IS 556 THE PRINTED CIRCUIT BOARD?

6 MR. OTTESON: IT'S PHOTOGRAPHS --

7 MR. LEARY: IT'S THE PHOTOGRAPHS.

8 MR. OTTESON: -- THAT THEY'VE HAD FOR MANY MONTHS.

9 THE COURT: AND IS 1626 THE 25 MICROPROCESSORS  
10 ARTICLE?

11 MR. LEARY: THAT'S CORRECT, YOUR HONOR.

12 THE COURT: ALL RIGHT. HERE'S WHAT WE'RE GOING TO  
13 DO: THE PHOTOGRAPHS THAT ARE 556 MAY BE USED. THE ACTUAL  
14 BOARDS, IF THEY WEREN'T MADE AVAILABLE FOR INSPECTION AND  
15 REVIEW, THEY'RE OUT.

16 AS FAR AS 1626, THERE'S NO 103 DEFENSE ANYMORE. IT'S OUT.  
17 LET'S MOVE ON TO THE NEXT ISSUE.

18 MR. OTTESON: THANK YOU, YOUR HONOR.

19 THE COURT: WHAT'S NEXT, MR. LEARY?

20 MR. LEARY: YOUR HONOR, NEXT WE WOULD LIKE TO ADDRESS  
21 THE PRELIMINARY JURY INSTRUCTIONS.

22 FOR THE MOST PART, THE -- HOLD ON JUST A MOMENT, YOUR  
23 HONOR. I'M SORRY.

24 THE COURT: I JUST POSTED THOSE ON THE DOCKET, SO IF  
25 YOU WANT TO SPEAK TO A FURTHER ISSUE, I'M HAPPY TO, BUT I'VE

1 ALREADY MADE MY RULING ON THAT ONE.

2 MR. LEARY: OKAY. FAIR ENOUGH.

3 MS. KEEFE: SORRY TO INTERRUPT. CAN YOU JUST LET ME  
4 KNOW WHAT IT WAS, YOUR HONOR? I DIDN'T GET A CHANCE TO SEE  
5 THEM AND FOR SOME REASON MY ECF IS NOT COMING UP.

6 THE COURT: I ACCEPTED THAT WE WILL NOT TELL THE JURY  
7 THAT YOU ARE NO LONGER PURSUING A VALIDITY DEFENSE. INSTEAD, I  
8 WILL SIMPLY NOTE, AS WAS REQUESTED, THAT YOU HAVE SOUGHT A  
9 DECLARATION OF NON-INFRINGEMENT.

10 MS. KEEFE: I APPRECIATE IT. THANK YOU, YOUR HONOR.

11 THE COURT: GO AHEAD, MR. LEARY. WHAT'S NEXT?

12 MR. LEARY: THE NEXT ISSUE ISN'T REALLY AN ISSUE, I  
13 DON'T THINK.

14 THE DEFENDANTS HAVE SERVED A MOTION OF, OR NOTICE OF  
15 NON-OPPOSITION. ALL WE'RE ASKING FOR WITH RESPECT TO THE JURY  
16 INSTRUCTION ON THE TERM "ENTIRE OSCILLATOR" IS THAT THE  
17 DEFENDANTS' PROPOSED JURY INSTRUCTION BE ADDED TO THE JURY  
18 INSTRUCTIONS AND THAT A SINGLE PARENTHESIS, WHICH I BELIEVE IS  
19 MISSING, IS ADDED AFTER THE NUMBER 13 IN THE ORDER.

20 MR. OTTESON: IF I COULD SEE WHAT YOU'RE PROPOSING,  
21 WE CAN SPEAK TO IT.

22 MR. LEARY: SURE. THIS -- WHAT I'M PROPOSING IS  
23 ACTUALLY WHAT YOU ALL PROPOSED WITH THE ADDITION OF JUST A  
24 PARENTHESIS.

25 MR. CARMACK: IF THERE'S A MISSING PARENTHESIS, WE

1 DON'T OBJECT.

2 MS. KEEFE: THAT'S ALL IT IS.

3 MR. LEARY: THAT'S IT.

4 (DISCUSSION OFF THE RECORD BETWEEN COUNSEL.)

5 THE COURT: LET ME SPARE YOU ALL THE TROUBLE. AGAIN,  
6 I'VE RULED ON THIS. IT'S ON THE DOCKET. I'VE ACCEPTED WHAT I  
7 THINK YOU JUST AGREED TO.

8 MR. LEARY: THANK YOU, YOUR HONOR.

9 THE COURT: LET'S MOVE TO THE NEXT ISSUE.

10 MR. CARMACK, WHAT'S ON YOUR LIST?

11 MR. CARMACK: THE LAST ISSUE HAS TO DO WITH TI'S  
12 WITNESS. WE GOT YOUR HONOR'S ORDER ON THAT, THANK YOU.

13 AND MR. SHARMA IS HERE AS WELL. WE UNDERSTAND FROM HIM  
14 THAT TI'S WITNESS, DR. HAROUN, WHICH IS THE SAME PERSON WHO  
15 TESTIFIED AT THE ITC, IS NOT AVAILABLE AFTER TOMORROW, AND WITH  
16 THE WAY THE SCHEDULE IS GOING, WE'RE NOT SURE THAT WE COULD GET  
17 HIM ON AND OFF TOMORROW UNLESS WE PUT HIM ON AS THE FIRST  
18 WITNESS IN OUR CASE, AND OBVIOUSLY WE DON'T WANT TO PUT AN  
19 ADVERSE WITNESS ON AS OUR FIRST WITNESS.

20 THE COURT: WELL, LET ME, BEFORE I TURN TO  
21 MR. SHARMA -- GOOD MORNING, MR. SHARMA.

22 MR. SHARMA: GOOD MORNING, YOUR HONOR.

23 THE COURT: LET ME OFFER UP ONE INSIGHT THAT MAY  
24 HOPEFULLY RESOLVE THIS PROBLEM.

25 IT'S OCCURRED TO ME THAT I AM GOING TO BE IN A POSITION

1 TOMORROW TO TAKE TESTIMONY BEGINNING AT 9:30 RUNNING THROUGH  
2 THE AFTERNOON. NOW, I MAY HAVE TO END EARLY, BUT WE WILL BE  
3 ABLE TO BEGIN WITH WITNESS TESTIMONY BEGINNING AT 9:30.

4 WILL THAT SOLVE YOUR PROBLEM, MR. SHARMA?

5 MR. SHARMA: YES, YOUR HONOR.

6 MR. CARMACK: OURS AS WELL.

7 MR. SHARMA: THE ONLY REQUIREMENT IS THAT THE  
8 WITNESS, DR. HAROUN, HAS TO GO BACK TOMORROW NIGHT TO ATTEND A  
9 MEDICAL PROCEDURE THAT STARTS TOMORROW NIGHT.

10 THE COURT: OKAY. WE'LL DO OUR BEST TO MAKE SURE HE  
11 GETS ON THAT PLANE.

12 MR. CARMACK: THANK YOU.

13 THE COURT: ANYTHING ELSE, MR. CARMACK, ON YOUR SIDE?

14 MR. CARMACK: NOTHING ELSE FROM US, YOUR HONOR.

15 THE COURT: ALL RIGHT. AS FAR AS THE SCHEDULE GOES,  
16 LET ME JUST OFFER SOME FURTHER THOUGHTS ABOUT THAT.

17 AS I MENTIONED YESTERDAY, I DID REVIEW MY WEEK AND IT HAS  
18 BECOME CLEAR TO ME WE CAN PROCEED TOMORROW WITH WITNESS  
19 TESTIMONY ACCORDING TO THE NORMAL SCHEDULE, AND I WANT TO  
20 REVIEW THAT NORMAL SCHEDULE WITH YOU ALL SO THAT NO ONE HAS ANY  
21 MISUNDERSTANDINGS.

22 I'M GOING TO INSTRUCT THE JURY TO APPEAR IN MY JURY ROOM  
23 AT 9:00 O'CLOCK EVERY MORNING WITH THE CAVEAT THAT WE WILL  
24 BEGIN WITNESS TESTIMONY AT 9:30.

25 SO BETWEEN 9:00 AND 9:30, YOU ALL SHOULD BE HERE IN THE

1 COURTROOM READY TO GO TO RAISE ANY ISSUES AS WE'VE JUST DONE.

2 IF THERE ARE NO ISSUES AND IF THE JURY HAPPENS TO BE HERE,  
3 WE'LL START EARLY, BUT IN NO EVENT WILL WE START PAST 9:30. I  
4 WANT TO GET THIS THING MOVING THROUGH.

5 TOMORROW I DO HAVE ONE HEARING WHICH IS CURRENTLY  
6 SCHEDULED FOR 3:00 P.M. IN ANOTHER MATTER. UNLESS SOMETHING  
7 SHOULD HAPPEN TODAY THAT WOULD CHANGE THAT SCHEDULE, WE'LL  
8 BREAK TOMORROW AT 3:00 O'CLOCK, YOU'LL BREAK, YOU CAN GO  
9 PREPARE FOR THE NEXT DAY, AND I'LL TURN TO THAT OTHER ISSUE IN  
10 THAT OTHER CASE.

11 WEDNESDAY, AGAIN, WE'LL START WITH THE USUAL SCHEDULE AT  
12 9:00 WITH THE JURY, 9:00 FOR YOU ALL, WITH TESTIMONY BEGINNING  
13 AT 9:30.

14 TRIAL WILL END EACH DAY, OTHER THAN TOMORROW, AT 4:30.  
15 WE'LL TAKE AN HOUR BREAK FOR LUNCH AND PERHAPS A 10 OR 15  
16 MINUTE BREAK DURING THE MORNING AND DURING THE AFTERNOON AS  
17 WELL.

18 ALL RIGHT. SO THAT'S THE SCHEDULE I HAVE IN MIND.

19 YOU ALL UNDERSTAND, I BELIEVE, THAT YOU HAVE AN HOUR EACH  
20 FOR OPENINGS, AN HOUR EACH FOR CLOSINGS, AND 15 HOURS FOR  
21 DIRECTS AND CROSSES.

22 ESPECIALLY IN LIGHT OF THE STREAMLINING THAT'S TAKEN  
23 PLACE, WHICH I COMMEND YOU ALL FOR, I DON'T THINK THERE WILL BE  
24 A PROBLEM, BUT THERE WILL BE A CLOCK AND IF YOU NEED TO CHECK  
25 IT, MR. RIVERA CAN CERTAINLY HELP YOU WITH THAT DURING THE



1 BREAKS.

2 ALL RIGHT. ARE THERE ANY OTHER LOGISTICS ISSUES? MY  
3 UNDERSTANDING FROM MR. RIVERA IS THAT THE JURY WAS BEING  
4 ASSEMBLED DOWNSTAIRS.

5 ARE WE READY TO GO, MR. RIVERA?

6 THE CLERK: YES, YOUR HONOR. WE HAVE 45 JURORS  
7 REPORTING.

8 THE COURT: OKAY, WE HAVE 45.

9 MS. KEEFE.

10 MS. KEEFE: I JUST WANT TO ASK YOUR HONOR HOW HE  
11 PREFERS THINGS TO BE DONE. I UNDERSTAND THAT YOU'RE GOING TO  
12 ASK THE QUESTIONS ON THE JUROR BIOGRAPHICAL INFORMATION SHEET  
13 AND THEREAFTER PROCEED EACH OF US GETS A HALF HOUR TO DO  
14 INDIVIDUAL VOIR DIRE?

15 THE COURT: THAT'S CORRECT.

16 MS. KEEFE: IS YOUR HONOR OKAY WITH ADDRESSING THE  
17 ENTIRE POOL WITH "COULD YOU RAISE YOUR HAND IF" THAT INCLUDES  
18 ALL THE JURORS?

19 THE COURT: ABSOLUTELY. I WANT YOU ALL TO DO YOUR  
20 JOBS, SO YOU CAN ADDRESS WHOMEVER YOU LIKE.

21 MY ONLY SUGGESTION IS, GIVEN MY METHODOLOGY, SPENDING A LOT  
22 OF TIME ON NUMBERS 42, 43, 44, AND 45 IS PROBABLY NOT  
23 PRODUCTIVE BECAUSE THE ODDS THAT THEY'RE GOING TO MAKE THEIR  
24 WAY THROUGH THE CHAIN ARE PRETTY SMALL.

25 MS. KEEFE: I JUST WANTED TO MAKE SURE YOU WEREN'T

1 LIMITED TO THE PEOPLE IN THE BOX FIRST.

2 THE COURT: NOT AT ALL.

3 MS. KEEFE: UNTIL THEY COME BACK, IT'S --

4 THE COURT: NOT AT ALL. YOU HAVE THE ENTIRE PANEL TO  
5 WORK WITH.

6 ALL RIGHT. ANY OTHER ISSUES? IF NOT, WHAT WE'LL DO IS  
7 TAKE A SHORT RECESS, MR. RIVERA WILL GET THE POTENTIAL JURORS,  
8 WE'LL BRING THEM BACK IN AND WE'LL GET STARTED.

9 ALL RIGHT. THANK YOU.

10 (RECESS FROM 9:19 A.M. UNTIL 9:33 A.M.)

11 THE CLERK: JURORS PLEASE STAND AND RAISE YOUR RIGHT  
12 HAND.

13 (PROSPECTIVE JURY PANEL SWORN.)

14 THE COURT: LADIES AND GENTLEMEN, MY NAME IS  
15 PAUL GREWAL AND I SERVE AS A UNITED STATES MAGISTRATE JUDGE  
16 HERE IN THE NORTHERN DISTRICT OF CALIFORNIA.

17 IT IS MY PRIVILEGE AND PLEASURE TO WELCOME YOU TO THIS  
18 COURT THIS MORNING AND TO THIS MORNING'S TRIAL.

19 OVER THE COURSE OF THE NEXT SEVERAL HOURS, YOU WILL HEAR  
20 FROM ME A NUMBER OF INSTRUCTIONS, AND FOR SOME OF YOU, THOSE  
21 INSTRUCTIONS WILL CONTINUE OVER THE NEXT SEVERAL DAYS.

22 IF AT ANY POINT ANY OF YOU DO NOT UNDERSTAND ONE THING I'M  
23 SAYING TO YOU, YOU LET ME KNOW AND I'LL DO MY BEST TO CLARIFY  
24 THE SITUATION.

25 BEFORE I DO ANYTHING ELSE, I WANT TO EXPLAIN TO YOU WHY

1 YOU HAVE YOU'VE BEEN SUMMONED TO SERVE IN THIS COURT THIS  
2 MORNING.

3 YOU'VE BEEN SUMMONED TO SERVE BECAUSE JURORS PERFORM A  
4 VITAL SERVICE IN OUR AMERICAN SYSTEM OF JUSTICE. THE  
5 PROTECTION OF OUR RIGHTS, OUR LIBERTIES, THEY DEPEND IN PART ON  
6 MEMBERS OF THE COURT SUCH AS MYSELF AND MY STAFF, BUT THEY  
7 ULTIMATELY DEPEND UPON YOU, THE MEMBERS OF THIS COMMUNITY.

8 AND SO I THANK YOU FOR THAT SERVICE. I THANK YOU FOR YOUR  
9 TIME AND YOUR COMMITMENT TO THIS PROCEEDING. I KNOW I SPEAK ON  
10 BEHALF OF ALL OF THE PARTIES AND ALL OF THE ATTORNEYS IN  
11 EXPRESSING MY GRATITUDE TO YOU FOR YOUR COMMITMENT TO THIS  
12 PROCEEDING HERE TODAY AND, AGAIN, FOR SOME OF YOU, OVER THE  
13 NEXT SEVERAL DAYS.

14 YOU SHOULD UNDERSTAND THAT EVERY CASE THAT MAKES ITS WAY  
15 UP TO THE SUPREME COURT, IN MOST SITUATIONS I SHOULD SAY,  
16 BEGINS IN A COURT JUST LIKE THIS ONE, AND SO THOSE FAMOUS  
17 DECISIONS YOU MAY HAVE STUDIED IN ELEMENTARY OR IN MIDDLE  
18 SCHOOL, PERHAPS HIGH SCHOOL, THE ONES YOU READ ABOUT ON  
19 TELEVISION -- READ ABOUT IN THE NEWSPAPERS AND SEE ON  
20 TELEVISION, IN MOST CASES THEY BEGIN A COURT JUST LIKE THIS  
21 ONE.

22 I DON'T KNOW IF THIS CASE WILL MAKE ITS WAY UP TO THE  
23 SUPREME COURT OR NOT, BUT YOU SHOULD UNDERSTAND THAT WE TREAT  
24 EVERY CASE AS IF IT IS A MATTER OF THAT SIGNIFICANCE, AND SO I  
25 HOPE YOU'LL BRING THAT SAME SPIRIT TO YOUR WORK HERE TODAY.

1           THROUGHOUT THIS PROCESS THERE MAY BE AN OCCASION OR TWO,  
2           PERHAPS EVEN THREE, WHEN I WILL BE REQUIRED TO MEET WITH THE  
3           LAWYERS SEPARATELY FROM YOU ALL AND APART FROM YOU ALL, AND WE  
4           DO THIS IN A PROCEEDING WE CALL A SIDE-BAR CONFERENCE. I MAY  
5           HAVE THE SIDE-BAR CONFERENCE OVER HERE, I MAY HAVE IT OVER  
6           HERE.

7           IT CAN BE FRUSTRATING, UNDOUBTEDLY, TO HAVE LAWYERS AND  
8           JUDGES WHISPERING AND KIBITZING OFF TO THE SIDE WHILE YOUR  
9           VALUABLE TIME IS BEING CONSUMED. I WANT TO APOLOGIZE FOR THAT  
10          AT THE VERY BEGINNING AND ASSURE YOU THAT WE ARE MEETING  
11          WITH -- WE'RE MEETING SEPARATELY FROM YOU AND OUTSIDE OF YOUR  
12          PRESENCE NOT TO UNNECESSARILY KEEP INFORMATION FROM YOU OR TO  
13          WASTE ANY OF YOUR TIME. WE'RE DOING THAT TO ENSURE THAT THE  
14          PROCEEDING IN THIS COURT FOLLOWS THE STANDARDS THAT I'VE JUST  
15          ARTICULATED AND THAT THE INTEGRITY OF THIS PROCESS IS  
16          MAINTAINED AT ALL TIMES.

17          IN A TRIAL LIKE THIS ONE, THE VERY FIRST PROCESS, OR THE  
18          VERY FIRST STEP IN THE PROCESS I SHOULD SAY, IS TO PICK THE  
19          ACTUAL JURY THAT WILL SERVE IN THIS CASE, AND YOU SHOULD  
20          UNDERSTAND THAT THIS SELECTION PROCESS IS SOMETHING WE REFER TO  
21          IN THE COURT SOMETIMES AS VOIR DIRE.

22          IT IS A PROCESS THAT'S AIMED AT GETTING A FAIR  
23          REPRESENTATION OF THE COMMUNITY TO SIT IN JUDGMENT OF THE FACTS  
24          IN THIS CASE.

25          THAT MEANS, BY DEFINITION, THAT SOME OF YOU WILL NOT BE

1 CALLED TO SERVE, AND YOU SHOULD NOT TAKE THAT AS A REFLECTION  
2 UPON YOUR FAIRNESS, BUT RATHER UNDERSTAND THAT WE ARE TRYING TO  
3 MAKE SURE THAT THESE PARTIES AND THESE LAWYERS WHO HAVE WORKED  
4 VERY HARD TO GET TO THIS POINT HAVE A FAIR REPRESENTATION OF  
5 THE COMMUNITY, AND SO THAT'S WHY WE MUST GO THROUGH THIS  
6 PROCESS.

7 NOW, TO GET TO THAT FAIR REPRESENTATION OF THE COMMUNITY,  
8 WE WILL HAVE TO ASK YOU, THIS MORNING, A NUMBER OF QUESTIONS.  
9 AFTER THE COURT AND THE LAWYERS HAVE CONSUMED YOUR ANSWERS TO  
10 THOSE QUESTIONS, WE WILL MEET SEPARATELY TO DECIDE WHICH JURORS  
11 ARE MOST APPROPRIATELY PICKED TO SERVE AS THE JURY IN THIS  
12 CASE.

13 NOW, TO DO THAT, WE WILL CONSIDER WHETHER JURY SERVICE  
14 WILL IMPOSE AN UNDUE HARDSHIP ON ANY OF YOU. THERE MAY BE  
15 CERTAIN REASONS WHY THERE'S GOOD CAUSE TO EXCLUDE YOU FROM THE  
16 JURY THAT SITS IN THIS CASE.

17 AND FINALLY, EACH SIDE WILL HAVE A LIMITED NUMBER OF WHAT  
18 WE CALL PEREMPTORY CHALLENGES, WHICH ALLOWS THE LAWYERS IN THIS  
19 CASE TO EXERCISE THEIR PROFESSIONAL JUDGMENT ABOUT WHO IS BEST  
20 SERVED TO SERVE AS JURORS IN THIS CASE.

21 NOW, AS TO ALL OF THESE QUESTIONS I'M ABOUT TO ASK YOU,  
22 AND PERHAPS THE LAWYERS MAY AS WELL, UNDERSTAND THIS: NONE OF  
23 US INTEND TO PRY UNNECESSARILY INTO YOUR PERSONAL LIVES. ALL  
24 THAT WE ARE TRYING TO DO IS TO LEARN THE LIMITED AND NECESSARY  
25 FACTS THAT WE NEED TO HAVE IN OUR POSSESSION TO DETERMINE

1 WHETHER OR NOT YOU CAN SERVE AS A JUROR IN THIS CASE.

2 SO, AGAIN, WITH FULL APOLOGIES FOR WHAT MAY SEEM LIKE AN  
3 UNDUE INTRUSION INTO YOUR PERSONAL AFFAIRS, I CAN ASSURE YOU WE  
4 ARE NOT ASKING THESE QUESTIONS FOR ANY UNTOWARD PURPOSE.

5 YOU SHOULD UNDERSTAND THAT IN ANSWERING ANY QUESTION I MAY  
6 ASK YOU OR THAT ANY OF THE LAWYERS ASK YOU, YOU MUST FOLLOW ONE  
7 RULE AT ALL TIMES: THAT RULE IS BE HONEST. BE HONEST WITH ME,  
8 BE HONEST WITH THE LAWYERS THAT ARE HERE IN THIS COURT, AND  
9 ULTIMATELY BE HONEST WITH YOURSELF.

10 IF I ASK YOU, OR IF THE LAWYERS ASK YOU EVEN ONE QUESTION  
11 THAT MAKES YOU UNCOMFORTABLE, THAT MAKES YOU A LITTLE NERVOUS,  
12 A LITTLE ANXIOUS MAYBE, YOU STILL HAVE TO BE HONEST. YOU HAVE  
13 TO ANSWER THE QUESTION.

14 BUT I WILL GIVE YOU THIS: IF YOU FEEL THAT YOU WOULD BE  
15 MORE COMFORTABLE ANSWERING ANY ONE OF OUR QUESTIONS IN PRIVATE,  
16 SEPARATE FROM HAVING 70 OF YOUR BEST FRIENDS HEAR THE ANSWER TO  
17 THAT QUESTION, I'LL UNDERSTAND THAT AND WHAT WE'LL DO IS WE'LL  
18 BRING YOU UP HERE, YOU GET TO HAVE A SIDE-BAR IN THAT INSTANCE  
19 IN WORKING WITH ME AND WITH THE LAWYERS, AND WE'LL GET THE  
20 ANSWER TO THE QUESTION IN A WAY THAT'S NOT SO EMBARRASSING OR  
21 UNCOMFORTABLE FOR YOU.

22 NOW, YOU'RE GOING TO HEAR A LOT FROM ME TODAY AND, AGAIN,  
23 FOR SOME OF YOU OVER THE NEXT SEVERAL DAYS, BUT YOU'RE ALSO  
24 GOING TO HEAR A LOT FROM THE LAWYERS IN THIS CASE.

25 WHAT I WOULD LIKE TO DO AT THIS POINT IN TIME IS TO ALLOW

1 EACH OF THE SETS OF LAWYERS IN THIS CASE TO INTRODUCE  
2 THEMSELVES AND THEIR TEAM MEMBERS, AS WELL AS THEIR CLIENTS.

3 AND SO WITH THAT, MR. OTTESON, I'M GOING TO ASK YOU TO GO  
4 FIRST, SIR. PLEASE INTRODUCE YOURSELF AS WELL AS MEMBERS OF  
5 YOUR TEAM AND YOUR CLIENT.

6 MR. OTTESON: THANK YOU VERY MUCH, JUDGE.

7 MY NAME IS JIM OTTESON. I AM AT A LAW FIRM IN MENLO PARK  
8 CALLED AGILITY IP LAW. WE SPECIALIZE IN PATENT INFRINGEMENT  
9 CASES, WHICH THIS IS ONE.

10 AND LET ME INTRODUCE MY TEAM MEMBERS. THIS IS MY COLLEAGUE  
11 PHIL MARSH, TOM CARMACK, DAVID LANSKY.

12 I'D ALSO LIKE TO INTRODUCE YOU TO CHUCK MOORE, WHO IS THE  
13 INVENTOR OF THE PATENT THAT'S GOING TO BE AT ISSUE.

14 A FEW OF MY OTHER COLLEAGUES IN THE BACK, IRVIN TYAN -- IF  
15 YOU COULD JUST RAISE YOUR HAND, IRVIN -- JED PHILIPS, AND  
16 MICHELLE BREIT.

17 SO IT'S A PLEASURE TO MEET YOU. THANK YOU FOR YOUR  
18 SERVICE.

19 THE COURT: THANK YOU, MR. OTTESON.

20 MR. HOGE: GOOD MORNING, YOUR HONOR. MY NAME IS  
21 CHARLIE HOGE. I REPRESENT PATRIOT SCIENTIFIC CORPORATION,  
22 WHICH IS -- THIS IS CLIFFORD FLOWERS, WHO'S THE CEO.

23 PATRIOT IS A COMPANY BASED IN CARLSBAD. IT'S ONE OF THE  
24 CO-OWNERS OF THE PATENTS AT ISSUE. I WORK WITH A SAN DIEGO  
25 FIRM CALLED KIRBY, NOONAN, LANCE & HOGE. GOOD MORNING.

1 MR. OTTESON: I APOLOGIZE, JUDGE. I NEGLECTED TO  
2 INTRODUCE MY CLIENTS.

3 I REPRESENT TWO OF THE OTHER DEFENDANTS IN THE CASE, TPL,  
4 OR TECHNOLOGY PROPERTIES LIMITED, AND ALLIACENSE, AND WE HAVE  
5 THE PRINCIPALS FROM THOSE FIRMS TODAY, DAN LECKRONE, IN THE  
6 BACK, IS THE CEO OF TPL; AND MACK LECKRONE IS THE CEO OF  
7 ALLIACENSE.

8 AND WE ARE ON THE SAME SIDE AS PATRIOT. WE ARE CO-OWNERS  
9 OF THE PATENT AT ISSUE.

10 THANK YOU.

11 THE COURT: THANK YOU.

12 MS. KEEFE, GOOD MORNING.

13 MS. KEEFE: THANK YOU, YOUR HONOR. GOOD MORNING. MY  
14 NAME IS HEIDI KEEFE. I'M AN ATTORNEY WITH A LAW FIRM NAMED  
15 COOLEY LLP HERE IN SILICON VALLEY AND IT'S MY PLEASURE TODAY TO  
16 BE REPRESENTING THE DEFENDANTS IN THIS CASE, HTC AND HTC  
17 AMERICA.

18 WITH ME TODAY I'M PROUD TO INTRODUCE MY COLLEAGUE  
19 STEVE SMITH, MY COLLEAGUE RON LEMIEUX.

20 ALSO IN THE AUDIENCE, WE'RE FORTUNATE TO HAVE JENNIE HUANG  
21 WITH US FROM THE CLIENT, HTC, SHE'S STANDING ON THE BACK WALL.

22 AND WE ALSO VERY MUCH THANK YOU FOR YOUR TIME, ATTENTION,  
23 AND SERVICE. WE'LL TRY TO MAKE THIS AS QUICK AS POSSIBLE FOR  
24 YOU.

25 THANK YOU.



1 THE COURT: THANK YOU, MS. KEEFE.

2 ALL RIGHT, LADIES AND GENTLEMEN. HERE'S HOW WE'RE GOING  
3 TO GET THROUGH ALL THESE QUESTIONS THIS MORNING IN AS EFFICIENT  
4 A MANNER AS POSSIBLE.

5 EACH OF YOU SHOULD HAVE A NUMBERED CARD WITH YOU AT YOUR  
6 SEAT. NOW, IT'S IMPORTANT THAT YOU UNDERSTAND HOW YOU SHOULD  
7 ANSWER THE QUESTIONS THAT WE ARE ABOUT TO ASK. WHEN I ASK YOU  
8 A QUESTION OR ONE THE ATTORNEYS ASK YOU A QUESTION AND THE  
9 QUESTION IS A YES OR A NO TYPE OF A QUESTION, THE WAY YOU  
10 ANSWER YES TO THAT QUESTION IS YOU HOLD YOUR CARD UP HIGH, AND  
11 I SAY SPECIFICALLY THAT YOU HOLD THAT CARD UP HIGH WITH THE  
12 NUMBER FACING OUTWARD BECAUSE WHAT YOU MUST APPRECIATE IS THAT  
13 THE LAWYERS HERE HAVE A VERY DIFFICULT JOB. THEIR JOB IS NOT  
14 JUST TO ASK THE RIGHT QUESTIONS AND TO LISTEN TO WHAT YOU ALL  
15 HAVE TO SAY IN RESPONSE TO THOSE QUESTIONS, THEIR JOB IS TO  
16 TRACK THAT INFORMATION.

17 AND SO WITH 40-SOME FOLKS HERE TO ANSWER QUESTIONS THIS  
18 MORNING, IT CAN TAKE A BIT OF TIME, SO IF YOU CAN DO YOUR BEST  
19 TO KEEP YOUR CARD NUMBERS UP, IT WILL HELP THEM DO THEIR JOB  
20 AND GET US ALL MOVING ALONG AS QUICKLY AS POSSIBLE.

21 DOES EVERYBODY UNDERSTAND THAT?

22 ALL RIGHT. THAT WAS THE FIRST TEST. NONE OF YOU RAISED  
23 YOUR CARD UP TO INDICATE YES.

24 (LAUGHTER.)

25 THE COURT: OKAY. THIS IS GOING TO BE A LONG DAY.

1 (LAUGHTER.)

2 THE COURT: LET ME BEGIN BY ASKING EACH OF YOU, NOW  
3 THAT YOU HAVE BEEN INTRODUCED TO THE ATTORNEYS, TO ME, AND TO  
4 THE CLIENTS, DO ANY OF YOU KNOW ANY OF THESE ATTORNEYS,  
5 CLIENTS, OR PEOPLE THAT MAY BE EMPLOYED BY THEM? IF THE ANSWER  
6 TO THAT QUESTION IS YES, PLEASE HOLD YOUR CARD NUMBER UP HIGH  
7 UNTIL I RECOGNIZE IT AND THEN I'LL INVITE YOU TO TURN IT DOWN.

8 I SEE JUROR NUMBER 3 AND JUROR NUMBER 18, JUROR NUMBER 21,  
9 JUROR NUMBER 33. AND I HAVE YOU, JUROR NUMBER 3. THANK YOU,  
10 SIR.

11 ALL RIGHT. LET ME BEGIN WITH YOU, JUROR NUMBER 33 -- I'M  
12 SORRY -- JUROR NUMBER 3. COULD YOU PLEASE TELL ME WHO YOU  
13 KNOW?

14 PROSPECTIVE JUROR: DON'T KNOW PERSONALLY, BUT I'VE  
15 ACTUALLY WORKED WITH COOLEY IN A FEW JOBS THAT I WORKED WITH.

16 THE COURT: MAY I ASK YOU TO DESCRIBE GENERALLY THE  
17 TYPE OF WORK YOU DID WITH COOLEY?

18 PROSPECTIVE JUROR: I DO PROCUREMENT AND CONTRACTS  
19 WITH COMPANIES IN SILICON VALLEY, SO I'VE NEGOTIATED CONTRACTS  
20 WITH THAT COMPANY DIRECTLY.

21 THE COURT: AND WHEN YOU SAY YOU'VE BEEN NEGOTIATING  
22 CONTRACTS, HAVE THEY BEEN OPPOSITE TO YOU IN THESE  
23 NEGOTIATIONS?

24 PROSPECTIVE JUROR: IT WAS FOR THE BEST INTERESTS OF  
25 THE COMPANY THAT I REPRESENT.

1 THE COURT: OKAY. BUT YOU NEVER WORKED FOR COOLEY  
2 YOURSELF?

3 PROSPECTIVE JUROR: NO, SIR.

4 THE COURT: AND DO YOU HAPPEN TO KNOW ANY OF THESE  
5 ATTORNEYS WHO ARE SITTING HERE?

6 PROSPECTIVE JUROR: NO, I DO NOT.

7 THE COURT: THEY MAY HAVE A FEW FOLLOW-UP QUESTIONS,  
8 BUT I APPRECIATE YOUR ANSWERS, SIR.

9 JUROR NUMBER 18, I BELIEVE YOU RAISED YOUR CARD. WHERE ARE  
10 YOU? GOOD MORNING, MA'AM.

11 PROSPECTIVE JUROR: GOOD MORNING.

12 THE COURT: WHO DO YOU KNOW?

13 PROSPECTIVE JUROR: I'M NOT SURE THIS QUALIFIES, BUT  
14 I WORKED WITH COOLEY DOWN AT SEASCAPE RESORT. THEY COME TO OUR  
15 RESORT EVERY YEAR. SO I DIDN'T WANT TO LIE, SO --

16 THE COURT: NO, YOU DON'T WANT TO DO THAT, I CAN  
17 ASSURE YOU OF THAT.

18 MAY I ASK, MA'AM, DO YOU HAPPEN TO KNOW ANY OF THESE  
19 ATTORNEYS PERSONALLY?

20 PROSPECTIVE JUROR: I DO NOT.

21 THE COURT: ALL RIGHT. THANK YOU JUROR NUMBER 18.

22 JUROR NUMBER 21, I BELIEVE YOU RAISED YOUR CARD.

23 PROSPECTIVE JUROR: YES, I DID. I DON'T KNOW COOLEY  
24 PERSONALLY. MY HUSBAND WORKED FOR A COMPANY NAME SYNERGY AND  
25 THEY DID SOME BUSINESS CONSULTING WITH COOLEY. HE DID A

1 ONE-DAY WORK SHOP WITH THEM A NUMBER OF YEARS AGO.

2 THE COURT: WHEN YOU SAY YOU DON'T KNOW ANY OF THEM  
3 PERSONALLY, YOU DON'T KNOW ANY OF THESE LAWYERS AT ALL?

4 PROSPECTIVE JUROR: CORRECT.

5 THE COURT: THANK YOU, MA'AM.

6 JUROR NUMBER 33, I BELIEVE YOU RAISED YOUR CARD. GOOD  
7 MORNING, SIR.

8 PROSPECTIVE JUROR: GOOD MORNING, I'M A PATENT  
9 LITIGATOR AND I'VE LITIGATED AGAINST MS. KEEFE.

10 (LAUGHTER.)

11 THE COURT: MAY I ASK WHERE YOU WORK, SIR?

12 PROSPECTIVE JUROR: I WORK AT KRAMER, LEVIN, NAFTALIS  
13 & FRANKEL.

14 THE COURT: HAVE WE LITIGATED AGAINST EACH OTHER,  
15 SIR, IN A PREVIOUS LIFE?

16 PROSPECTIVE JUROR: NOT AGAINST EACH OTHER, BUT I  
17 KNOW YOU.

18 (LAUGHTER.)

19 THE COURT: ALL RIGHT. I'VE LEAVE IT AT THAT, SIR.

20 CAN I ASK YOU, HAVING LITIGATED AGAINST MS. KEEFE AND  
21 HAVING SOME FAMILIARITY WITH MY WORK, DO YOU FEEL THERE'S  
22 ANYTHING IN THAT EXPERIENCE THAT WOULD PRECLUDE YOU FROM  
23 SERVING AS A JUROR, AN IMPARTIAL JUROR IN THIS CASE?

24 PROSPECTIVE JUROR: ABSOLUTELY NOT.

25 THE COURT: OKAY. LET ME -- I WILL -- LET ME CAUTION

1       YOU THAT THE LAWYERS HERE MAY HAVE SOME FOLLOW-UP QUESTIONS,  
2       BUT I APPRECIATE YOUR CANDOR, SIR.

3             ALL RIGHT. LET ME NEXT EXPLAIN TO EACH AND EVERY ONE OF  
4       YOU A LITTLE SOMETHING ABOUT THIS CASE. YOU'VE HEARD REFERENCE  
5       TO PATENTS AND PATENT INFRINGEMENT IN SOME OF THE EARLIER  
6       INTRODUCTIONS.

7             YOU'RE GOING TO HEAR A LOT MORE FROM ME AND MUCH, MUCH  
8       MORE FROM THE LAWYERS ABOUT THE DETAILS OF THIS CASE, BUT IN A  
9       NUTSHELL, WHAT THIS CASE IS ABOUT IS THE FOLLOWING:

10            HTC FILED SUIT IN THIS COURT SEEKING A DECLARATION THAT NO  
11       CLAIM OF A PARTICULAR UNITED STATES PATENT THAT WE ARE GOING TO  
12       REFER TO AS THE '336 PATENT IS INFRINGED BY HTC.

13            TPL FILED A COUNTER-COMPLAINT ALLEGING THAT HTC INFRINGES  
14       THIS '336 PATENT BY MAKING, IMPORTING, USING, SELLING, AND  
15       OFFERING FOR SALE PRODUCTS THAT TPL ARGUES ARE COVERED BY  
16       CERTAIN CLAIMS IN THAT PATENT.

17            TPL ALSO ARGUES THAT HTC ACTIVELY INDUCED THE INFRINGEMENT  
18       OF THESE CLAIMS AND SEEKS MONEY DAMAGES.

19            I WANT TO EMPHASIZE A COUPLE OF THINGS BEFORE I SAY  
20       ANYTHING ELSE.

21            FIRST AND FOREMOST, WHILE TPL BEARS THE BURDEN OF PROOF ON  
22       THE QUESTION OF INFRINGEMENT AND DAMAGES, HTC DENIES THOSE  
23       CLAIMS. NOTHING HAS BEEN PROVEN YET. YOU HAVEN'T EVEN HEARD  
24       ANY EVIDENCE. FRANKLY, YOU HAVEN'T EVEN HEARD ANY ARGUMENT AT  
25       THIS POINT.

1 SO DON'T FORM ANY OPINIONS IN YOUR MIND FROM ANYTHING I'VE  
2 JUST SAID. I'M JUST TRYING TO GIVE YOU SOME BACKGROUND FOR WHO  
3 TPL AND PATRIOT ARE, THOSE ARE THE FOLKS SITTING OVER HERE, AND  
4 WHO HTC IS, THE FOLKS SITTING OVER HERE.

5 NOW, ON THAT VERY LIMITED SUMMARY OF THE DISPUTE THAT I'VE  
6 JUST PROVIDED TO YOU, DO ANY OF YOU HAVE ANY KNOWLEDGE OF THE  
7 FACTS OF THIS CASE, OF THIS PATENT INFRINGEMENT LAWSUIT?  
8 ANYONE HAVE ANY KNOWLEDGE WHATSOEVER? NO? ALL RIGHT.

9 I WANT TO LIST FOR YOU SOME INDIVIDUALS WHO MAY TESTIFY  
10 DURING THE COURSE OF THIS TRIAL. NOW, A FEW OF THESE FOLKS  
11 HAVE BEEN INTRODUCED ALREADY. THERE MAY BE OTHERS WHO TESTIFY  
12 IN THIS CASE, BUT I WANT TO AT LEAST GIVE YOU A LIST OF NAMES  
13 THAT YOU SHOULD KEEP IN MIND.

14 AND AS I'M RECITING THESE NAMES, I WANT YOU TO ASK  
15 YOURSELF, DO I KNOW THIS PERSON? HAVE I WORKED WITH HER? HAVE  
16 I COME ACROSS HIM IN ANY PERSONAL OR PROFESSIONAL CONTEXT? AND  
17 THEN I'LL ASK YOU A FEW QUESTIONS ABOUT THAT IN A MOMENT.

18 POTENTIAL WITNESS LIST IS THE FOLLOWING: MARTIN FICHTER;  
19 EDWARD LIANG; THOMAS GAFFORD; CHRISTOPHER BOKHART; SINA DENA;  
20 DANIEL LECKRONE; CHARLES MOORE; RUSSELL FISH, THE THIRD;  
21 BAHAR HAROUN; DANIEL LECKRONE; GLORIA FELCYN; VOJIN OKLOBDZIJA;  
22 STEVEN PROWSE.

23 DO ANY OF YOU KNOW ANY OF THESE POTENTIAL WITNESSES?  
24 JUROR NUMBER 27.

25 ANY OTHERS? NO? OKAY.

1           AND AGAIN, I WANT TO UNDERSCORE, WHEN I SAY POTENTIAL  
2           WITNESS, I MEAN POTENTIAL.  THESE FOLKS MAY TESTIFY, THEY MAY  
3           NOT, AND THE FACT THAT THEY HAVE BEEN IDENTIFIED AND ULTIMATELY  
4           ARE NOT CALLED AS WITNESSES SHOULD NOT BE GIVEN ANY WEIGHT IN  
5           YOUR MIND WHATSOEVER.

6           JUROR NUMBER 27, GOOD MORNING, SIR.

7           PROSPECTIVE JUROR:  HI, GOOD MORNING, JUDGE.  I TOOK  
8           A CLASS UNDER PROFESSOR OKLOBDZIJA AT U.C. DAVIS.

9           THE COURT:  AND CAN I ASK YOU, SIR, WHAT CLASS WAS  
10          THAT?

11          PROSPECTIVE JUROR:  IT WAS CIRCUITS DESIGN.

12          THE COURT:  AND WHEN DID YOU TAKE THE CLASS?

13          PROSPECTIVE JUROR:  '95 OR -- '94 OR '95.

14          THE COURT:  HAVE YOU HAD ANY CONTACT WITH  
15          DR. OKLOBDZIJA SINCE THEN?

16          THE DEFENDANT:  NO.

17          THE COURT:  AND WAS IT JUST THIS ONE CLASS, SIR?

18          PROSPECTIVE JUROR:  YES.

19          THE COURT:  CAN I ASK YOU HOW YOU DID IN THE CLASS,  
20          SIR?

21          (LAUGHTER.)

22          PROSPECTIVE JUROR:  IT'S THE ONLY CLASS IN MY  
23          UNDERGRAD THAT I GOT A B PLUS IN.

24          (LAUGHTER.)

25          THE COURT:  I PROMISE NOT TO TELL YOUR MOTHER, SIR.

1 (LAUGHTER.)

2 THE COURT: ALL RIGHT. DOES ANYONE ELSE KNOW ANY  
3 POTENTIAL WITNESS IN THIS CASE?

4 ALL RIGHT. LET ME GIVE YOU A LITTLE SENSE OF THE SCHEDULE  
5 THAT WE INTEND TO KEEP DURING THE COURSE OF THIS TRIAL. IT IS  
6 MY EXPECTATION -- AND I SAY "EXPECTATION" VERY GUARDEDLY --  
7 THAT TRIAL WILL CONTINUE THROUGHOUT THIS WEEK AND INTO THE  
8 NEXT. IT MAY GO EVEN FURTHER. TRIALS HAVE A WAY OF TAKING ON  
9 A LIFE OF THEIR OWN, BUT I HAVE EVERY EXPECTATION THAT WE WILL  
10 COMPLETE THIS TRIAL BY THE END OF NEXT WEEK.

11 NOW, THE TRIAL DAY WE WILL KEEP IS AS FOLLOWS: EACH JUROR  
12 WILL BE REQUIRED TO REPORT TO THIS COURT NO LATER THAN 9:00  
13 O'CLOCK IN THE MORNING. THOSE OF YOU SELECTED FOR THE JURY  
14 WILL GATHER IN MY JURY ROOM, WHICH IS OVER HERE TO MY LEFT. WE  
15 WILL BEGIN THE TRIAL DAY AT 9:30.

16 NOW, YOU MAY ASK, WHY DO I HAVE TO BE HERE AT 9:00 O'CLOCK  
17 IF WE'RE GOING TO START AT 9:30?

18 THE REASON FOR THAT IS THAT I WILL WORK WITH THE LAWYERS  
19 TO RESOLVE AS MANY ISSUES AS WE CAN BETWEEN 9:00 AND 9:30 SO  
20 THAT ONCE WE BEGIN TRIAL, YOUR TIME IS NOT WASTED.

21 I NEED YOU HERE AT 9:00 O'CLOCK BECAUSE IT MAY BE THAT  
22 THERE ARE NO DISPUTES AND THAT WE CAN BEGIN RIGHT AWAY. IN  
23 CASE YOU HAVEN'T PICKED THIS UP, MY GOAL HERE IS TO GET YOU ON  
24 YOUR WAY AS QUICKLY AS POSSIBLE WHILE ASSURING THE PARTIES AND  
25 THE LAWYERS IN THIS CASE OF A FAIR PROCEEDING.



1 SO IF YOU'RE HERE AT 9:00, READY TO GO AT 9:30, THINGS  
2 WILL MOVE ALONG RELATIVELY SMOOTHLY.

3 WE WILL END EACH TRIAL DAY AT 4:30 IN THE AFTERNOON SHARP.

4 WE'LL TAKE A ONE HOUR LUNCH BREAK, TYPICALLY BETWEEN 12:00  
5 AND 1:00, AND WE MAY ALSO TAKE A SHORT FIVE OR TEN MINUTE BREAK  
6 IN THE MORNING AND/OR THE AFTERNOON IN ORDER TO ALLOW YOU TO  
7 STRETCH YOUR LEGS AND PERHAPS EVEN STEP OUTSIDE AND GET SOME  
8 FRESH AIR.

9 WITH THIS SCHEDULE IN MIND, DOES ANYONE FACE AN UNDUE  
10 BURDEN IN SERVING AS A JUROR IN THIS CASE? AND I SAY "UNDUE  
11 BURDEN" BECAUSE UNDERSTAND THAT I APPRECIATE THAT COMING TO  
12 COURT FOR ANY PERIOD OF TIME IS A BURDEN, BUT IF YOU ATTEMPT TO  
13 AVOID JURY SERVICE BASED ON THE SCHEDULE, UNDERSTAND YOU'RE  
14 SHIFTING THAT BURDEN ONTO SOME OTHER MEMBER OF THE COMMUNITY.

15 SO WITH THAT ADMONITION IN MIND, DOES ANYONE FACE AN UNDUE  
16 BURDEN OF THE SCHEDULE THAT I'VE JUST IDENTIFIED? KEEP YOUR  
17 CARDS UP AND WE'LL GO THROUGH THIS.

18 JUROR NUMBER 1.

19 PROSPECTIVE JUROR: YES, YOUR HONOR.

20 THE COURT: JUROR NUMBER 7 -- I JUST NEED TO GO  
21 THROUGH THEM AND THEN I'LL CAPTURE IT -- JUROR NUMBER 12,  
22 NUMBER 14, 16, 18, 21, 28 -- AND YOU CAN PUT YOUR CARD DOWN  
23 ONCE I'VE CALLED YOUR NUMBER, THANK YOU -- 32, 34, 35, 38, 40,  
24 42, 44, 45.

25 DID I MISS ANYONE? I DON'T THINK SO.

1           ALL RIGHT. LET'S BEGIN WITH JUROR NUMBER 1. SIR, WHAT IS  
2 THE UNDUE BURDEN YOU FACE WITH THIS SCHEDULE I'VE IDENTIFIED?

3           PROSPECTIVE JUROR: MY BOSS AND I RUN A BUSINESS IN  
4 MENLO PARK AND MY BOSS IS ON VACATION. THERE'S NOBODY AT WORK  
5 RIGHT NOW.

6           THE COURT: CAN YOU ASK YOU WHAT KIND OF BUSINESS  
7 YOU'RE IN, SIR?

8           PROSPECTIVE JUROR: WE MANUFACTURE WOOD MOLDING, AND  
9 THINGS LIKE THIS HAVE TO BE RUN THROUGH MACHINERY TO MAKE THE  
10 SHAPE AND SMOOTHNESS AND WE MAKE ALL KINDS OF ARCHITECTURAL  
11 THINGS.

12          THE COURT: YOU SAY THERE'S NO ONE TO RUN THE  
13 BUSINESS. HOW LONG IS YOUR BOSS GOING TO BE GONE, SIR?

14          PROSPECTIVE JUROR: HE'S GOING TO BE GONE THIS WEEK,  
15 YOUR HONOR.

16          THE COURT: ALL RIGHT. THANK YOU, SIR.

17          JUROR NUMBER 7, I BELIEVE YOU RAISED YOUR CARD.

18          PROSPECTIVE JUROR: YES.

19          THE COURT: GOOD MORNING, MA'AM. WHAT IS YOUR BURDEN  
20 WITH THIS SCHEDULE?

21          PROSPECTIVE JUROR: THIS IS KIND OF EMBARRASSING. I  
22 HAVE A BLADDER PROBLEM, LIKE I HAVE TO GO TO THE BATHROOM EVERY  
23 30 MINUTES OR SO.

24          THE COURT: I APPRECIATE YOUR TELLING US THAT, MA'AM.  
25 THAT'S NOTHING TO BE EMBARRASSED ABOUT.

1 CAN I ASK YOU, MA'AM, IF I WERE TO ACCOMMODATE THAT  
2 RESTRICTION AND GIVE YOU A CHANCE TO TAKE A BATHROOM BREAK MORE  
3 REGULARLY, WOULD THAT ALLOW YOU TO SERVE?

4 PROSPECTIVE JUROR: NO.

5 THE COURT: WOULD IT BE DIFFICULT FOR YOU?

6 PROSPECTIVE JUROR: YES.

7 THE COURT: OKAY. THANK YOU, JUROR NUMBER 7.

8 NUMBER 12, GOOD MORNING.

9 PROSPECTIVE JUROR: I HAVE A BUSINESS AND I AM THE  
10 SOLE PROPRIETOR AND I'M THE ONE WHO -- IT'S A DRY CLEANERS, SO  
11 I DO THE DRY CLEANING ON THE PREMISES AND WAIT ON CUSTOMERS.  
12 AND WE'RE CLOSED TODAY SO I CAN BE HERE.

13 THE COURT: I UNDERSTAND. MAY I ASK, MA'AM, WHERE IS  
14 YOUR DRY CLEANING BUSINESS?

15 PROSPECTIVE JUROR: IN CAMPBELL.

16 THE COURT: DO YOU HAVE ANY EMPLOYEES AT ALL?

17 PROSPECTIVE JUROR: A PRESSER AND A -- IN THE  
18 AFTERNOON, A PERSON THAT WAITS ON CUSTOMERS. BUT THEY CAN'T BE  
19 THERE UNLESS I'M THERE.

20 THE COURT: AND YOU'RE ACTUALLY CLOSED THIS MORNING?

21 PROSPECTIVE JUROR: YES.

22 THE COURT: THANK YOU.

23 JUROR NUMBER 14.

24 PROSPECTIVE JUROR: BECAUSE OF MY SCHOOL SCHEDULE, I  
25 TAKE AFTERNOON CLASSES.

1 THE COURT: WHERE ARE YOU IN SCHOOL, MA'AM?

2 PROSPECTIVE JUROR: CALIFORNIA STATE UNIVERSITY  
3 MONTEREY BAY.

4 THE COURT: MAY I ASK A LITTLE BIT, SOMETHING ABOUT  
5 THE AFTERNOON SCHEDULE. WHEN DO YOUR CLASSES BEGIN?

6 PROSPECTIVE JUROR: THEY BEGIN AT 4:00.

7 THE COURT: AND MAY I ASK APPROXIMATELY HOW LONG IT  
8 TAKES YOU TO GET FROM WHERE YOU LIVE DOWN IN MONTEREY UP TO THE  
9 COURTHOUSE, OR THE REVERSE COMMUTE?

10 PROSPECTIVE JUROR: IT TOOK ME AN HOUR AND A HALF  
11 TODAY.

12 THE COURT: OKAY. THANK YOU, MA'AM.

13 JUROR NUMBER 16, I BELIEVE YOU RAISED YOUR CARD. GOOD  
14 MORNING, SIR.

15 PROSPECTIVE JUROR: GOOD MORNING.

16 THE COURT: WHAT IS YOUR BURDEN?

17 PROSPECTIVE JUROR: MY BURDEN REALLY HAS TO DO WITH  
18 FRIDAY OF THIS WEEK. I'M A REPLAY OFFICIAL IN THE MOUNTAIN  
19 WEST CONFERENCE, AND I HAVE A BALL GAME.

20 THE COURT: MAY I ASK WHERE YOUR BALL GAME IS, SIR?

21 PROSPECTIVE JUROR: YES, YOU MAY. IT'S AT SAN JOSE  
22 STATE.

23 THE COURT: KICKOFF IS AT 7:30, I BELIEVE.

24 PROSPECTIVE JUROR: KICKOFF IS AT 6:00. IT'S A  
25 NATIONALLY TELEVISED GAME. I HAVE TO BE THERE AT 3:00.

1 THE COURT: DO YOU WEAR THE WHITE HAT, SIR?

2 PROSPECTIVE JUROR: NO, SIR. I'M IN THE REPLAY  
3 BOOTH.

4 THE COURT: OKAY. MAY I ASK IF YOU WERE EXCUSED TO  
5 MAKE IT, IS THE GAME -- IT'S A HOME GAME ON FRIDAY IF I RECALL.

6 PROSPECTIVE JUROR: IT'S A HOME GAME.

7 THE COURT: IF I COULD GET YOU TO THE STADIUM AT 3:00  
8 O'CLOCK ON FRIDAY, WOULD YOU HAVE ANY PROBLEM WITH THE  
9 SCHEDULE?

10 PROSPECTIVE JUROR: PROBABLY NOT.

11 THE COURT: ALL RIGHT. I APPRECIATE THAT, SIR.

12 JUROR NUMBER 18, I BELIEVE YOU RAISED YOUR CARD.

13 PROSPECTIVE JUROR: I LIVE TWO HOURS AWAY. I LIVE IN  
14 SOUTH SALINAS. SO IT IS A CHALLENGE. I'M NOT GOING TO SAY  
15 IT'S A BURDEN, BUT IT'S A CHALLENGE TO GET HERE.

16 AND I'M NOT REIMBURSED FOR SERVING FROM MY EMPLOYER.

17 THE COURT: MAY I ASK, MA'AM, WHERE DO YOU WORK?

18 PROSPECTIVE JUROR: SEASCAPE RESORT IN APTOS.

19 THE COURT: AND DID YOU HAVE TO TAKE A DAY OFF OF  
20 WORK TO COME HERE THIS MORNING?

21 PROSPECTIVE JUROR: UH-HUH. WELL, I'M GOING TO MILK  
22 IT. IT'LL BE A SICK DAY.

23 (LAUGHTER.)

24 THE COURT: I DID TELL YOU TO BE HONEST, DIDN'T I?

25 (LAUGHTER.)

1 THE COURT: I APPRECIATE YOUR SHARING THAT.

2 JUROR NUMBER 21, I BELIEVE YOU ALSO RAISED YOUR CARD.

3 GOOD MORNING. GO AHEAD.

4 PROSPECTIVE JUROR: I'M A SOLE PROPRIETOR FAMILY LAW  
5 ATTORNEY AND I HAVE TWO EMPLOYEES WHO I PAY WITH MY, WHEN I  
6 WORK HOURLY, SO THAT IS SOMEWHAT OF A FINANCIAL BURDEN.

7 I HAVE THREE HEARINGS AND A SETTLEMENT CONFERENCE I'LL  
8 HAVE TO RESCHEDULE IN THE NEXT TWO WEEKS.

9 THE COURT: AND MAY I ASK, WHERE IS YOUR PRACTICE  
10 LOCATED, MA'AM?

11 PROSPECTIVE JUROR: SANTA CRUZ COUNTY.

12 THE COURT: THANK YOU.

13 JUROR NUMBER 28, GOOD MORNING, MA'AM.

14 PROSPECTIVE JUROR: GOOD MORNING. I HAVE AN EVENT --  
15 I WORK FOR A SMALL START-UP COMPANY IN SAN FRANCISCO AND WE  
16 HAVE AN EVENT IN LAS VEGAS FOR THE WHOLE WEEK. IT'S A USER  
17 CONFERENCE AND I RUN A PRETTY SUBSTANTIAL PORTION OF THE  
18 MARKETING. SO I HAVE CUSTOMERS, PARTNERS, ANALYSTS, SECTIONS,  
19 ALL OF THAT LINED UP FOR NEXT WEEK.

20 THE COURT: THE CONFERENCE BEGINS NEXT MONDAY, MA'AM?

21 PROSPECTIVE JUROR: THAT'S RIGHT. AND HOTEL IS  
22 BOOKED, FLIGHT IS BOOKED, EVERYTHING.

23 THE COURT: MAY I ASK WHAT COMPANY YOU WORK FOR?

24 PROSPECTIVE JUROR: SPLUNK.

25 THE COURT: ALL RIGHT. THANK YOU JUROR NUMBER 28.

1 JUROR NUMBER 32, I BELIEVE YOU WERE NEXT. GOOD MORNING.

2 PROSPECTIVE JUROR: GOOD MORNING. I HAVE CHILDCARE  
3 ISSUES. I WORK FULL TIME IN AND MY HUSBAND IS TRAVELLING THE  
4 END OF THIS WEEK THROUGH EARLY NEXT WEEK AND MY BACK-UP PLAN,  
5 MY MOTHER, IS TRAVELLING AS WELL.

6 SO I NEED TO PICK MY KIDS UP AT 5:00 O'CLOCK AND COMING  
7 FROM HERE, IT COULD BE CHALLENGING. YOU NEVER KNOW THE TRAFFIC  
8 HEADING OVER.

9 THE COURT: MAY I ASK, DO YOU TAKE THE 17 OVER?

10 PROSPECTIVE JUROR: YEAH. I WORK IN PALO ALTO, TOO.

11 THE COURT: JUROR NUMBER 32, IF I WERE TO ADJUST THE  
12 SCHEDULE SO THAT YOU COULD LEAVE ABOUT 90 MINUTES BEFORE YOU  
13 NEEDED TO PICK UP YOUR KIDS, WOULD THAT SOLVE YOUR PROBLEM?

14 PROSPECTIVE JUROR: POTENTIALLY, YES. I'M ALWAYS A  
15 LITTLE NERVOUS WHEN MY HUSBAND IS NOT ON THAT SIDE OF THE HILL  
16 AND I'M OVER HERE WITH MY KIDS BEING OVER THERE, BUT YES,  
17 POTENTIALLY.

18 THE COURT: ALL RIGHT. THANK YOU, MA'AM.

19 JUROR NUMBER 34, I BELIEVE YOU'RE NEXT.

20 PROSPECTIVE JUROR: I GET PAID BY THE HOUR, SO I  
21 DON'T GET PAID FROM MY BOSS, SO FOR THE NEXT TWO WEEKS, I WOULD  
22 HAVE A FINANCIAL ISSUE.

23 THE COURT: CAN I ASK WHAT KIND OF WORK YOU DO,  
24 MA'AM?

25 PROSPECTIVE JUROR: I WORK FOR AN ENVIRONMENTAL

1 CONSULTING FIRM. YOU WANT THE COMPANY NAME?

2 THE COURT: IF YOU COULD, RAM.

3 PROSPECTIVE JUROR: CALLED TRA ENVIRONMENTAL.

4 THE COURT: WHERE IS THAT LOCATED?

5 PROSPECTIVE JUROR: MENLO PARK.

6 THE COURT: THANK YOU, JUROR NUMBER 34.

7 JUROR NUMBER 35?

8 PROSPECTIVE JUROR: YES.

9 THE COURT: GOOD MORNING, MA'AM.

10 PROSPECTIVE JUROR: IT'S A SCHEDULING CHALLENGE. MY  
11 NIECE IS GETTING MARRIED IN MALIBU OCTOBER 5TH, AND PRE UP TO  
12 OCTOBER 4TH; AND THEN ON OCTOBER 14 IS ANOTHER NEPHEW GETTING  
13 MARRIED IN HAWAII AND I HAVE MY TICKET READY.

14 THE COURT: ALL RIGHT. I TAKE IT, MA'AM, IF WE WERE  
15 TO WRAP THIS TRIAL UP BEFORE THE 5TH, YOU WOULDN'T HAVE ANY  
16 PROBLEMS?

17 PROSPECTIVE JUROR: NO.

18 THE COURT: OKAY.

19 PROSPECTIVE JUROR: I'LL BE FINE.

20 THE COURT: THANK YOU.

21 JUROR NUMBER 38, I BELIEVE YOU ARE NEXT. HELLO, MA'AM.

22 PROSPECTIVE JUROR: GOOD MORNING. I WORK FOR A SMALL  
23 START-UP MEDICAL DEVICE COMPANY AND I'M IN CUSTOMER SERVICE,  
24 ORDER PROCESSING, AND I'M THE ONLY ONE THAT DOES THE ORDER  
25 PROCESSING. THE ONLY OTHER PERSON THAT CAN HANDLE IT IS THE



1 DIRECTOR OF CUSTOMER SERVICE.

2 SO I ONLY GET PAID FOR THREE DAYS OF JURY DUTY, BUT THAT'S  
3 NOT SUCH A BIG THING.

4 IF I'M NOT THERE, NO ONE ELSE IS REALLY PROCESSING THE  
5 ORDERS FOR THE THINGS.

6 THE COURT: MAY I ASK THE NAME OF YOUR COMPANY,  
7 MA'AM?

8 PROSPECTIVE JUROR: PIVOT MEDICAL.

9 THE COURT: WHERE IS PIVOT MEDICAL LOCATED?

10 PROSPECTIVE JUROR: SUNNYVALE.

11 THE COURT: THANK YOU. MAY I ASK, MA'AM, SO WHO'S  
12 PROCESSING THE ORDERS THIS MORNING?

13 PROSPECTIVE JUROR: MY BOSS, ALONG WITH BILLINGS AND  
14 SETTING UP THE CUSTOMER ACCOUNTS.

15 THE COURT: ALL RIGHT. THANK YOU.

16 JUROR NUMBER 40, I BELIEVE YOU HAD YOUR CARD UP. GOOD  
17 MORNING, SIR.

18 PROSPECTIVE JUROR: GOOD MORNING. THE FIRST ONE IS  
19 I'M CURRENTLY UNEMPLOYED AS AN ELECTRICIAN, AND THE JOB CALL  
20 LINE IS GETTING CLOSE TO ME. IF IT PASSES ME, I'LL BE OUT OF  
21 WORK FOR ANOTHER MONTH OR TWO. I'VE BEEN OUT FOR A MONTH  
22 ALREADY.

23 ALSO, MY FOSTER KIDS ARE GOING TO BE TRANSITIONING INTO  
24 THEIR FAMILY IN MINNESOTA AND I HAVE TO BE FLY WITH THEM IN  
25 ORDER TO MAKE THE TRANSITION EASIER.

1 THE COURT: WHEN ARE THEY SCHEDULED TO FLY TO  
2 MINNESOTA, SIR?

3 PROSPECTIVE JUROR: I BELIEVE IT STARTS THIS THURSDAY  
4 AND THEY GET BACK ON MONDAY.

5 THE COURT: THANK YOU, SIR. JUROR NUMBER 8, I SEE  
6 YOUR WAVING YOUR CARD.

7 PROSPECTIVE JUROR: I'M GOING TO APOLOGIZE, BECAUSE I  
8 HAD A SURGERY THREE YEARS AGO FOR MY GALLBLADDER, SO AFTER  
9 THAT, I SOMETIMES I OUT OF -- I NEED TO GO TO THE RESTROOM  
10 JUST -- YEAH.

11 THE COURT: OKAY.

12 PROSPECTIVE JUROR: FOR MORE THAN 99 PERCENT I'M  
13 OKAY, BUT JUST SOMETIMES IT HAPPENS.

14 THE COURT: ALL RIGHT. I APPRECIATE YOUR TELLING ME  
15 THAT, JUROR NUMBER 8.

16 ALL RIGHT. JUROR NUMBER -- AH, NUMBER 25. GO AHEAD, SIR.

17 PROSPECTIVE JUROR: THAT'S ALL RIGHT. I DIDN'T RAISE  
18 MINE, BUT THE ISSUE THAT I MIGHT HAVE IS ENGLISH. I MIGHT NOT  
19 UNDERSTAND A LOT OF, A LOT OF QUESTIONS. SO THAT MIGHT BE A  
20 BIG PROBLEM.

21 THE COURT: OKAY. MAY I ASK, SIR, I TAKE IT ENGLISH  
22 IS NOT YOUR FIRST LANGUAGE.

23 PROSPECTIVE JUROR: NO, IT'S NOT MY FIRST LANGUAGE.

24 THE COURT: OKAY. SIR, DO YOU WORK IN A COMPANY OR  
25 AT A --

1 PROSPECTIVE JUROR: YES, I WORK AT A COMPANY.

2 THE COURT: OKAY. IS ENGLISH THE LANGUAGE THAT'S  
3 USED THERE?

4 PROSPECTIVE JUROR: YES. THEY'RE GOING TO SEND ME TO  
5 ENGLISH CLASSES. I'M GOING TO ENGLISH CLASSES RIGHT NOW.

6 THE COURT: OKAY. HAVE YOU HAD ANY PROBLEMS  
7 UNDERSTANDING ANYTHING I'VE SAID SO FAR THIS MORNING, SIR?

8 PROSPECTIVE JUROR: THE QUESTION ABOUT WHEN EVERYBODY  
9 RAISE THE NUMBER.

10 THE COURT: ALL RIGHT. I APPRECIATE YOUR SHARING  
11 THAT WITH ME, SIR. AGAIN, WE MAY HAVE SOME FOLLOW-UP QUESTIONS  
12 FOR YOU, SIR, BUT IT'S IMPORTANT FOR YOU TO BE CANDID WITH ME.

13 I BELIEVE WE'RE UP TO NUMBER 42. GOOD MORNING, MA'AM.  
14 WHAT IS YOUR UNDUE BURDEN?

15 PROSPECTIVE JUROR: SOME PHYSICAL INFIRMITIES.

16 THE COURT: ARE YOU COMFORTABLE SHARING THEM WITH ME  
17 IN FRONT OF ALL THESE FOLKS?

18 PROSPECTIVE JUROR: YES. I HAVE SPINAL STENOSIS,  
19 SCOLIOSIS, AND ARTHRITIS. IT'S DIFFICULT TO BE INACTIVE FOR --  
20 YOU KNOW, TO JUST SIT FOR A LONG TIME.

21 THE COURT: MAY I ASK, MA'AM, ABOUT HOW LONG CAN YOU  
22 SIT BEFORE YOU NEED TO STAND AND MOVE ABOUT?

23 PROSPECTIVE JUROR: OH, MAYBE AN HOUR.

24 THE COURT: OKAY. ALL RIGHT. I APPRECIATE YOU  
25 SHARING THAT WITH ME, MA'AM.

1           NUMBER 42, I BELIEVE -- I'M SORRY. 44, I BELIEVE YOU WERE  
2           NEXT.

3           PROSPECTIVE JUROR: YES. I WORK ON COMMISSION ONLY  
4           AND MY HUSBAND JUST GOT BACK TO WORK TWO WEEKS AGO. HE'S BEEN  
5           OUT OF WORK FOR FIVE MONTHS. SO ALL OF MY INCOME HAS BEEN  
6           GOING TO OUR INSURANCE, MEDICAL INSURANCE. SO --

7           THE COURT: I TAKE IT FROM WHAT YOU'RE TELLING ME,  
8           MA'AM, THAT BECAUSE YOU WORK ON COMMISSION, YOU DON'T GET PAID  
9           ANY DAY THAT YOU'RE HERE IN COURT; IS THAT RIGHT?

10          PROSPECTIVE JUROR: YES.

11          THE COURT: I APPRECIATE THAT, MA'AM.

12          JUROR NUMBER 45, DID YOU ALSO HAVE YOUR CARD UP?

13          PROSPECTIVE JUROR: YEAH.

14          THE COURT: GO AHEAD, SIR.

15          PROSPECTIVE JUROR: I'M A FULL TIME STUDENT AT  
16          CABRILLO COLLEGE IN APTOS, AND IF I'M NOT AT SCHOOL FOR THE  
17          NEXT SEVERAL DAYS, I MIGHT BE PUT ON ACADEMIC PROBATION.

18          THE COURT: ARE YOU A FULL TIME STUDENT, SIR?

19          PROSPECTIVE JUROR: YES.

20          THE COURT: OKAY. CAN I ASK HOW MANY COURSES YOU'RE  
21          TAKING THIS TERM?

22          PROSPECTIVE JUROR: I'M TAKING FIVE COURSES.

23          THE COURT: OKAY. ALL RIGHT. I APPRECIATE YOUR  
24          SHARING THAT WITH ME, SIR.

25          LET ME RETURN TO AN ISSUE THAT SOME OF YOU HAVE RAISED IN

1 RESPONSE TO MY EARLIER QUESTIONS, WHICH IS THIS: DO ANY OF YOU  
2 HAVE ANY PHYSICAL DISABILITIES THAT WOULD PREVENT YOU FROM  
3 SITTING AS A JUROR IN THIS CASE? SOME OF YOU HAVE ALREADY  
4 SHARED THAT INFORMATION. YOU DON'T NEED TO RAISE YOUR HAND A  
5 SECOND TIME.

6 BUT NOW THAT YOU UNDERSTAND THAT THIS TRIAL WILL REQUIRE  
7 YOU TO SIT FOR SOME PERIOD OF TIME IN THIS COURTROOM, DO ANY  
8 OTHERS HAVE PHYSICAL ISSUES THAT I OUGHT TO BE MADE AWARE OF?

9 OKAY. NUMBER 19 AND 24.

10 JUROR NUMBER 19, WHY DON'T YOU TELL ME, SIR, WHAT THE  
11 ISSUE IS?

12 PROSPECTIVE JUROR: HEMORRHOIDS.

13 THE COURT: ALL RIGHT. MAY I ASK, SIR, ARE YOU ABLE  
14 TO GO ABOUT AN HOUR OR SO AT A TIME? WHEN I SAY "GO," I MEAN  
15 ARE YOU ABLE TO SIT IN A CHAIR FOR AN HOUR OR SO?

16 PROSPECTIVE JUROR: YEAH, KIND OF DAY-TO-DAY. IT  
17 DEPENDS ON HOW THEY ACT UP. MOST DAYS ARE OKAY, BUT THERE ARE  
18 TIMES WHEN THEY'RE IRRITATED.

19 THE COURT: I UNDERSTAND, SIR.

20 ALL RIGHT. JUROR NUMBER 24.

21 PROSPECTIVE JUROR: I CAN SIT FOR ABOUT AN HOUR. I  
22 HAVE BACK PROBLEMS.

23 THE COURT: OKAY. ANY OTHER PHYSICAL ISSUES I OUGHT  
24 TO BE MADE AWARE OF?

25 ALL RIGHT. LET ME NEXT TURN AND -- TURN TO ANOTHER ISSUE,

1 WHICH IS PREVIOUS JURY SERVICE. I'D LIKE TO KNOW WHETHER ANY  
2 OF YOU HAVE PREVIOUSLY SERVED AS A JUROR IN ANY KIND OF COURT  
3 WHATSOEVER, STATE, FEDERAL, BIG, SMALL, DOESN'T MATTER. RAISE  
4 YOUR CARDS UP AND I'LL ASK A FEW FURTHER QUESTIONS ABOUT THAT.

5 JUROR NUMBER 9, JUROR NUMBER 10, 19, 21, 30, 34, 38, AND  
6 42. THANK YOU.

7 I'M GOING TO BEGIN WITH JUROR NUMBER 9. THERE YOU ARE,  
8 SIR. MAY I ASK, WHEN DID YOU SERVE AS A JUROR?

9 PROSPECTIVE JUROR: THE LAST TIME I SERVED AS A JUROR  
10 WAS LAST YEAR, AND I HAVE SERVED FOUR OTHER TIMES BEFORE THAT.

11 THE COURT: YOU'RE KIND OF A PROFESSIONAL JUROR, SIR,  
12 AREN'T YOU?

13 (LAUGHTER.)

14 THE COURT: MAY I ASK, IN THE MOST RECENT CASE THAT  
15 YOU SERVED, IN WHICH YOU SERVED, WHAT KIND OF CASE WAS IT?

16 PROSPECTIVE JUROR: IT -- IT WAS A FRAUD CASE AND  
17 EMBEZZLEMENT.

18 THE COURT: OKAY. NOW, I DON'T WANT YOU TO TELL ME  
19 THE OUTCOME OF THE CASE, AND YOU'RE GOING TO HEAR ME REMIND ALL  
20 OF YOU OF THAT OVER AND OVER AGAIN, BUT WITHOUT TELLING ME THE  
21 OUTCOME OF THE CASE, WAS A VERDICT REACHED?

22 PROSPECTIVE JUROR: YES.

23 THE COURT: OKAY. AND DID YOU SERVE AS EITHER THE  
24 PRESIDING JUROR OR FOREPERSON IN THAT CASE?

25 PROSPECTIVE JUROR: I WAS NUMBER 11.

1 THE COURT: I'M SORRY. I MISSED THAT LAST PART.

2 PROSPECTIVE JUROR: NUMBER 11.

3 THE COURT: YOU WERE --

4 PROSPECTIVE JUROR: JUROR NUMBER 11.

5 THE COURT: AND AS JUROR NUMBER 11, WERE YOU THE  
6 FOREMAN?

7 PROSPECTIVE JUROR: NO. IT WAS NUMBER 12 WAS THE  
8 FOREMAN.

9 THE COURT: OKAY. DID YOU GET TO PARTICIPATE IN THE  
10 VERDICT AS JUROR NUMBER 11?

11 PROSPECTIVE JUROR: YES.

12 THE COURT: OKAY. CAN I ASK YOU, SIR, AGAIN, WITHOUT  
13 TELLING ME THE OUTCOME OF THE CASE, FOR MY BENEFIT, HOW WOULD  
14 YOU DESCRIBE YOUR EXPERIENCE SERVING AS A JUROR, EITHER IN THIS  
15 CASE OR ANY OF THE OTHER FIVE IN WHICH YOU'VE SERVED?

16 PROSPECTIVE JUROR: WELL, IT'S SOMEWHAT -- THE OTHER  
17 CASES WAS QUITE DIFFERENT BECAUSE TWO OF THE CASES WAS  
18 CRIMINAL, AND THE FIRST CASE WAS A CIVIL CASE AND THEN THERE  
19 WAS A SETTLEMENT AFTER A COUPLE DAYS OF TRIAL.

20 BUT THE EXPERIENCE HAS BEEN -- SOMETIMES I WOULD SAY I  
21 WOULD RATHER BE DOING SOMETHING ELSE. BUT I DID SERVE AND IT  
22 WAS A GOOD EXPERIENCE.

23 THE COURT: IT WAS A GOOD EXPERIENCE?

24 PROSPECTIVE JUROR: YEAH.

25 THE COURT: WAS THIS MOST RECENT CASE, SIR, IN STATE

1 COURT, IN THE SUPERIOR COURT?

2 PROSPECTIVE JUROR: TWO OF THE CASES WERE IN SUPERIOR  
3 COURT FOR THE COUNTY OF SANTA CLARA, AND THEN THE OTHER TWO  
4 CASES WAS ON 70 WEST HEDDING.

5 THE COURT: OKAY. AND SO IN THIS MOST RECENT CASE  
6 YOU TALKED ABOUT, THE FRAUD CASE, THAT WAS A STATE COURT CASE?

7 PROSPECTIVE JUROR: YES.

8 THE COURT: OKAY. ALL RIGHT. THANK YOU, SIR.

9 JUROR 10, I BELIEVE YOU ALSO HAD SOME EXPERIENCE AS A  
10 JUROR. CAN YOU TELL ME, SIR, WHAT KIND OF CASE WAS THAT?

11 PROSPECTIVE JUROR: THE GENTLEMAN WAS ACCUSED OF  
12 RAPE.

13 THE COURT: ALL RIGHT. ABOUT HOW LONG AGO WAS THIS  
14 TRIAL, SIR?

15 PROSPECTIVE JUROR: YOU SAID TO BE HONEST, SO I'M NOT  
16 EXACTLY SURE, BUT IT'S BEEN ABOUT TEN YEARS.

17 THE COURT: MORE THAN FIVE YEARS AGO FOR SURE?

18 PROSPECTIVE JUROR: MORE THAN FIVE.

19 THE COURT: AGAIN, WITHOUT TELLING ME THE VERDICT IN  
20 THAT PARTICULAR CASE, WAS A VERDICT REACHED?

21 PROSPECTIVE JUROR: YES.

22 THE COURT: AND DID YOU SERVE AS EITHER THE  
23 FOREPERSON OR THE PRESIDING JUROR IN THAT CASE?

24 PROSPECTIVE JUROR: I WAS JUST A JUROR. I WAS ON THE  
25 JURY, NOT THE FOREMAN.



1 THE COURT: OKAY. MAY I ASK YOU, SIR, AGAIN, WITHOUT  
2 GETTING INTO ANY OF THE SPECIFICS OF THE VERDICT, WAS THE  
3 EXPERIENCE AS A WHOLE POSITIVE FOR YOU? OR NEGATIVE?

4 PROSPECTIVE JUROR: THE EXPERIENCE WAS POSITIVE. THE  
5 PROCESS WAS NOT THAT WE WENT THROUGH.

6 THE COURT: OKAY.

7 PROSPECTIVE JUROR: IT EXTENDED OVER THREE MONTHS.  
8 NOT -- AND I DON'T WANT TO MISLEAD. IT WAS PERIODIC.

9 THE COURT: I UNDERSTAND, SIR. SO WHEN I'M TALKING  
10 ABOUT A TRIAL OF A WEEK OR TWO, THIS LOOKS LIKE A WALK IN THE  
11 PARK, AS THEY SAY?

12 PROSPECTIVE JUROR: FORTUNATELY, I WAS UNEMPLOYED  
13 THEN, SO IT REALLY WASN'T A CONSEQUENCE.

14 THE COURT: WAS THERE ANYTHING IN THAT EXPERIENCE,  
15 SIR, EITHER THE DELAY OR ANYTHING ELSE, THAT WOULD MAKE IT  
16 DIFFICULT FOR YOU TO SERVE AS A FAIR AND IMPARTIAL JUROR IN  
17 THIS CASE?

18 PROSPECTIVE JUROR: NO.

19 THE COURT: ALL RIGHT. I APPRECIATE THAT, SIR.  
20 THANK YOU JUROR NUMBER 10.

21 JUROR NUMBER 19, I BELIEVE YOU HAD YOUR CARD UP.

22 PROSPECTIVE JUROR: YEAH.

23 THE COURT: HELLO, SIR.

24 PROSPECTIVE JUROR: HI.

25 THE COURT: WHEN DID YOU SERVE AS A JUROR, SIR?

1 PROSPECTIVE JUROR: IT WAS ABOUT THREE OR FOUR YEARS  
2 AGO, I BELIEVE.

3 THE COURT: AND WHAT KIND OF CASE WAS IT?

4 PROSPECTIVE JUROR: CHILD MOLESTATION.

5 THE COURT: WAS THIS IN STATE COURT, IN THE SUPERIOR  
6 COURT?

7 PROSPECTIVE JUROR: YES.

8 THE COURT: OKAY. WAS IT HERE IN SANTA CLARA COUNTY  
9 OR SOMEWHERE ELSE?

10 PROSPECTIVE JUROR: SANTA CLARA.

11 THE COURT: OKAY. AGAIN, WITHOUT TELLING ME WHAT  
12 KIND OF VERDICT WAS RENDERED, WAS THERE A VERDICT REACHED IN  
13 THAT CASE?

14 PROSPECTIVE JUROR: YES, THERE WAS.

15 THE COURT: DID YOU SERVE AS THE FOREMAN OF THAT  
16 JURY?

17 PROSPECTIVE JUROR: NO.

18 THE COURT: WAS THAT THE ONLY TIME IN WHICH YOU  
19 SERVED AS A JUROR, YOUR ONLY PREVIOUS EXPERIENCE?

20 PROSPECTIVE JUROR: YES.

21 THE COURT: AND I'LL ASK YOU THE SAME QUESTION, SIR.  
22 WITHOUT, AGAIN, COMMENTING ON THE ACTUAL VERDICT, WAS THE  
23 EXPERIENCE FOR YOU POSITIVE, NEGATIVE, OR SOMEWHERE IN BETWEEN?

24 PROSPECTIVE JUROR: SOMEWHERE IN BETWEEN. IT WAS A  
25 LITTLE BIT STRESSFUL.

1 THE COURT: COULD YOU DESCRIBE THE STRESS FOR US?

2 PROSPECTIVE JUROR: I THINK JUST TRYING TO COME TO A  
3 DECISION, LISTENING TO ALL THE TESTIMONY.

4 THE COURT: IT'S A SERIOUS RESPONSIBILITY. I BET YOU  
5 FELT THAT.

6 PROSPECTIVE JUROR: YEAH, THAT'S RIGHT.

7 THE COURT: THANK YOU, JUROR NUMBER 19.

8 JUROR NUMBER 21, I BELIEVE YOU ALSO RAISED YOUR CARD.

9 PROSPECTIVE JUROR: YES. I SERVED ABOUT 15 YEARS AGO  
10 IN SANTA CRUZ COUNTY SUPERIOR COURT IN A MINOR CRIMINAL MATTER.  
11 IT WAS A COCAINE POSSESSION CASE. AND WE SAT -- I THINK THE  
12 TRIAL AND THE DELIBERATIONS LASTED MAYBE FOUR OR FIVE DAYS. WE  
13 DID REACH A VERDICT.

14 THE COURT: OKAY. WERE YOU THE FOREPERSON OF THAT  
15 JUROR?

16 PROSPECTIVE JUROR: NO, I WAS NOT.

17 THE COURT: OKAY. WAS THAT YOUR ONLY PREVIOUS JURY  
18 EXPERIENCE, MA'AM?

19 PROSPECTIVE JUROR: YES.

20 THE COURT: MAY I ASK YOU, JUROR NUMBER 21, I BELIEVE  
21 YOU TOLD ME EARLIER YOU PRACTICE FAMILY LAW; IS THAT CORRECT?

22 PROSPECTIVE JUROR: YES.

23 THE COURT: AS A MEMBER OF THE BAR, HOW WOULD YOU  
24 DESCRIBE THE EXPERIENCE OF SERVING AS A JUROR?

25 PROSPECTIVE JUROR: I FOUND IT INTERESTING. IT WAS

1 JUST INTERESTING TO BE ON THE OTHER SIDE OF IT, ON THE OTHER  
2 SIDE OF THE CASE, AND OUR -- THE DELIBERATIONS ON OUR PANEL  
3 WERE KIND OF FRUSTRATING TO ME FOR REASONS I WON'T SHARE,  
4 BUT --

5 THE COURT: THOSE FRUSTRATIONS ASIDE, WOULD YOU  
6 DESCRIBE THE OVERALL EXPERIENCE AS POSITIVE?

7 PROSPECTIVE JUROR: YES.

8 THE COURT: OKAY. THANK YOU JUROR NUMBER 21.

9 JUROR NUMBER 30, I BELIEVE YOU ALSO RAISED YOUR CARD.

10 PROSPECTIVE JUROR: YES.

11 THE COURT: WHEN DID YOU SERVE AS A JUROR?

12 PROSPECTIVE JUROR: 2004, I THINK.

13 THE COURT: WHAT KIND OF CASE WAS THAT, SIR?

14 PROSPECTIVE JUROR: KIND OF A STRANGE CASE. THE  
15 PERSON WAS ACCUSED OF FLYING A HELICOPTER OVER A NATURE  
16 PRESERVE AND DISTURBING THE BIRDS. SO IT WAS -- THE NATURE  
17 PRESERVE IS, I GUESS, A FEDERAL NATURE PRESERVE, SO IT WAS LIKE  
18 A CRIMINAL CASE.

19 THE COURT: WAS IT IN FEDERAL COURT?

20 PROSPECTIVE JUROR: IT WAS HERE. I FORGOT --

21 THE COURT: WAS IT IN THIS SAME COURTHOUSE?

22 PROSPECTIVE JUROR: NOT THIS ONE, BUT IN THIS  
23 BUILDING.

24 THE COURT: AND YOU SAID THIS WAS BACK IN '04?

25 PROSPECTIVE JUROR: YEAH.

1 THE COURT: OKAY. MAY I ASK YOU, SIR, WAS A VERDICT  
2 REACHED IN THAT CASE?

3 PROSPECTIVE JUROR: YES.

4 THE COURT: AND WERE YOU THE FOREMAN OF THAT JURY?

5 PROSPECTIVE JUROR: NO.

6 THE COURT: HOW WOULD YOU DESCRIBE THAT EXPERIENCE?

7 PROSPECTIVE JUROR: IT WAS PRETTY INTERESTING.

8 THE COURT: WOULD YOU SAY YOU ACTUALLY LEARNED  
9 SOMETHING?

10 PROSPECTIVE JUROR: YEAH, I GUESS, NOT TO FLY A  
11 HELICOPTER OVER.

12 (LAUGHTER.)

13 THE COURT: I KIND OF WALKED INTO THAT ONE, DIDN'T I?

14 (LAUGHTER.)

15 THE COURT: I APPRECIATE THAT, JUROR NUMBER 30.

16 JUROR NUMBER 34, YOU ALSO RAISED YOUR CARD?

17 PROSPECTIVE JUROR: YEAH. IT WAS BACK IN MAYBE 2003  
18 OR '04.

19 THE COURT: AND WHAT KIND OF CASE WAS IT, MA'AM?

20 PROSPECTIVE JUROR: IT WAS DOMESTIC VIOLENCE.

21 THE COURT: OKAY. THIS WAS A DOMESTIC VIOLENCE CASE  
22 HERE IN SAN JOSE?

23 PROSPECTIVE JUROR: YEAH, BUT NOT HERE.

24 THE COURT: IN THE STATE COURT, MAYBE?

25 PROSPECTIVE JUROR: YEAH.

1 THE COURT: SUPERIOR COURT?

2 PROSPECTIVE JUROR: YEAH.

3 THE COURT: OKAY. CAN YOU TELL ME, MA'AM, DID THE  
4 JURY IN THAT CASE REACH A VERDICT?

5 PROSPECTIVE JUROR: YES.

6 THE COURT: OKAY. WERE YOU INVOLVED IN DELIBERATIONS  
7 IN THAT CASE?

8 PROSPECTIVE JUROR: YES.

9 THE COURT: WERE YOU --

10 PROSPECTIVE JUROR: I JUST GRADUATED FROM SCHOOL,  
11 COLLEGE.

12 THE COURT: OKAY.

13 PROSPECTIVE JUROR: SO I DIDN'T HAVE A JOB BACK THEN.

14 THE COURT: OKAY. CAN I ASK YOU, WERE THE FOREPERSON  
15 OF THAT JURY?

16 PROSPECTIVE JUROR: NO.

17 THE COURT: NO? HOW WAS YOUR EXPERIENCE AS A JUROR  
18 IN THAT CASE, MA'AM? HOW WOULD YOU DESCRIBE IT?

19 PROSPECTIVE JUROR: I GUESS BACK THEN I WAS YOUNG AND  
20 IT WAS KIND OF INTERESTING. BUT THEN AT THE SAME TIME, JUST  
21 HEARING BOTH SIDES KIND OF, HOW THE FAMILY DYNAMIC WAS KIND  
22 OF -- I DON'T KNOW. AND THEN LATER ON TO GO BACK TO THE  
23 VERDICT, IT WAS KIND OF, I DON'T KNOW, HARD. BUT FINE.

24 THE COURT: IT WAS CHALLENGING?

25 PROSPECTIVE JUROR: YEAH.

1 THE COURT: OKAY. I APPRECIATE YOUR SHARING THAT,  
2 MA'AM.

3 JUROR NUMBER 38, I BELIEVE YOU ALSO INDICATED THAT YOU  
4 SERVED PREVIOUSLY. COULD YOU TELL US A LITTLE SOMETHING ABOUT  
5 THAT EXPERIENCE? WHEN WAS THIS CASE?

6 PROSPECTIVE JUROR: IT WAS AROUND TEN YEARS, MAYBE  
7 MORE.

8 THE COURT: OKAY. WHAT KIND OF CASE WAS IT?

9 PROSPECTIVE JUROR: IT WAS A WRONGFUL DISMISSAL,  
10 EMPLOYEE OF THE CITY OF SAN JOSE.

11 THE COURT: OKAY. WAS A VERDICT REACHED IN THAT  
12 CASE?

13 PROSPECTIVE JUROR: YES.

14 THE COURT: AND DID YOU PARTICIPATE IN THE  
15 DELIBERATIONS? DID YOU HAVE A VOTE?

16 PROSPECTIVE JUROR: YEAH. I WASN'T THE FOREMAN,  
17 THOUGH.

18 THE COURT: YOU WEREN'T THE FOREPERSON OF THAT JURY,  
19 THOUGH. BUT A VERDICT WAS REACHED?

20 PROSPECTIVE JUROR: YES.

21 THE COURT: IS THAT THE ONLY TIME YOU SERVED AS A  
22 JUROR, MA'AM, BEFORE TODAY?

23 PROSPECTIVE JUROR: UM-HUM.

24 THE COURT: OKAY. CAN I ASK YOU, HOW WOULD YOU  
25 DESCRIBE THAT EXPERIENCE? WOULD YOU SAY IT WAS POSITIVE,

1           NEGATIVE, SOMEWHERE IN BETWEEN?

2                   PROSPECTIVE JUROR: I THINK THE EXPERIENCE WAS GOOD.  
3           AND I DIDN'T AGREE WITH THE DIRECTION IT WENT. BUT OTHER THAN  
4           THAT, I THOUGHT IT WAS A GREAT EXPERIENCE.

5                   THE COURT: CAN I ASK YOU, MA'AM, BECAUSE OUR TIME IS  
6           LIMITED, I CAN'T ASK YOU EVERYTHING ABOUT THAT EXPERIENCE, BUT  
7           YOU SAY IT WAS A GREAT EXPERIENCE ON THE WHOLE.

8                   WHAT'S ONE THING YOU LEARNED FROM THAT EXPERIENCE THAT  
9           MAYBE YOU DIDN'T KNOW BEFORE YOU SERVED? ANYTHING YOU CAN  
10          REMEMBER AT ALL? IT WAS A LONG TIME AGO, I KNOW.

11                  PROSPECTIVE JUROR: NOT REALLY.

12                  THE COURT: OKAY.

13                  PROSPECTIVE JUROR: I MEAN, WITHOUT GOING INTO DETAIL  
14          OF THE CASE OR ANYTHING, I MEAN, IT WAS A GOOD EXPERIENCE ON  
15          HEARING BOTH SIDES.

16                  THE COURT: OKAY.

17                  PROSPECTIVE JUROR: AGAIN, THE OUTCOME WAS A LITTLE  
18          FRUSTRATING.

19                  THE COURT: ALL RIGHT. I APPRECIATE YOU SHARING  
20          THAT.

21                  THANK YOU. NUMBER 42, I BELIEVE YOU ALSO SAID YOU SERVED  
22          PREVIOUSLY. WHEN WERE YOU A JUROR BEFORE, MA'AM?

23                  PROSPECTIVE JUROR: I THINK IT WAS ABOUT 30 YEARS  
24          AGO. IT'S HARD TO REMEMBER. IT WAS A TRAFFIC TRIAL. IT WAS  
25          IN PALO ALTO.



1 THE COURT: OKAY. SO MOST LIKELY IN THE STATE COURT  
2 UP IN PALO ALTO, IS THAT --

3 PROSPECTIVE JUROR: I DON'T REMEMBER.

4 THE COURT: OKAY. CAN YOU REMEMBER, MA'AM, DID THE  
5 JURY REACH A VERDICT IN THAT CASE?

6 PROSPECTIVE JUROR: I BELIEVE SO.

7 THE COURT: AND WERE YOU THE FOREPERSON OF THAT JURY?

8 PROSPECTIVE JUROR: NO.

9 THE COURT: NO. OTHER THAN THIS ONE TRAFFIC TYPE  
10 CASE, DID YOU EVER SERVE AS A JUROR BEFORE?

11 PROSPECTIVE JUROR: NO.

12 THE COURT: AND THINKING BACK 30 YEARS, WAS THE  
13 EXPERIENCE FOR YOU POSITIVE, NEGATIVE, SOMEWHERE IN BETWEEN?

14 PROSPECTIVE JUROR: OH, I THINK IT'S POSITIVE. IT'S  
15 ALWAYS AN INTERESTING EXPERIENCE.

16 THE COURT: I APPRECIATE YOU SHARING THAT, MA'AM.  
17 THANK YOU.

18 ALL RIGHT. LET'S TURN NEXT TO THE QUESTIONNAIRE.

19 ACTUALLY, THERE'S ONE OTHER QUESTION I WANT TO ASK YOU  
20 BEFORE WE GET TO THE QUESTIONNAIRE, WHICH IS SOMETIMES FOLKS  
21 HAVE PERSONAL VIEWS THAT MAKE IT DIFFICULT OR EVEN IMPOSSIBLE  
22 FOR THEM TO SERVE AS JURORS IN A CASE LIKE THIS. AND WHEN I  
23 SAY "PERSONAL VIEWS," WHAT I'M REALLY SPEAKING OF IS RELIGIOUS  
24 VIEWS, ETHICAL OR THEOLOGICAL VIEWS THAT MAY PREVENT THEM FROM  
25 SITTING IN JUDGMENT OF OTHERS.

1 DO ANY OF YOU HAVE ANY PERSONAL, RELIGIOUS OR ETHICAL  
2 VIEWS THAT WOULD PREVENT YOU FROM SERVING AS A JUROR IN THIS  
3 CASE? NO? OKAY.

4 WELL, THEN LET'S TURN TO THE QUESTIONNAIRE ITSELF.

5 EACH OF YOU SHOULD HAVE A COPY OF THIS --

6 JUROR NUMBER 24, GO AHEAD, MA'AM.

7 PROSPECTIVE JUROR: CAN WE HAVE A BREAK?

8 THE COURT: WE CAN. I'M ALMOST THERE, MA'AM.

9 PROSPECTIVE JUROR: ARE WE ALLOWED TO STEP OUT AND  
10 USE THE RESTROOM, OR NO?

11 THE COURT: UNFORTUNATELY, I CAN'T HAVE YOU LEAVE --  
12 UNLESS -- IS THIS A TRUE EMERGENCY? DO YOU HAVE TO GO? IT'S  
13 GOING TO DELAY EVERYTHING FOR THE ENTIRE ROOM.

14 PROSPECTIVE JUROR: IF IT'S TWO MINUTES.

15 THE COURT: LET ME GET THROUGH THE NEXT COUPLE OF  
16 MINUTES AND I'LL GIVE EVERYBODY A CHANCE. I JUST WANT TO KEEP  
17 EVERYBODY'S SCHEDULE AT HEART.

18 YOU SHOULD ALL HAVE A JUROR BIOGRAPHICAL INFORMATION  
19 SHEET. DO YOU HAVE THAT? OKAY. ALL RIGHT.

20 WELL, WHAT I'M GOING TO DO IS TO ASK EACH OF THE 45 OF YOU  
21 TO STAND UP AND RECITE THE ANSWERS TO THESE QUESTIONS. NOW, AS  
22 YOU MIGHT EXPECT, THIS MAY TAKE A FEW MINUTES, AND IN LIGHT OF  
23 THE REQUEST FOR A BATHROOM BREAK, OR A BREAK GENERALLY, I THINK  
24 IT MAKES SENSE FOR US TO TAKE THE BREAK FIRST BEFORE WE GO  
25 THROUGH THIS.

1 SO WITH THAT, WE WILL TAKE A SHORT FIVE MINUTE BREAK TO  
2 ALLOW YOU ALL TO USE THE RESTROOM. I WANT YOU TO COME BACK  
3 HERE, COME BACK TO THE SAME POSITIONS THAT YOU'VE ASSUMED AND  
4 WE'LL GO THROUGH THIS BIOGRAPHICAL SHEET AT THAT TIME.

5 WE'LL STAND IN RECESS.

6 (RECESS FROM 10:25 A.M. UNTIL 10:43 A.M.)

7 THE COURT: ALL RIGHT. LADIES AND GENTLEMEN, BEFORE  
8 WE BROKE I WAS ABOUT TO EXPLAIN TO YOU WHAT WE'RE GOING TO DO  
9 WITH THESE BIOGRAPHICAL SHEETS THAT YOU HAVE IN FRONT OF YOU.

10 WHAT I'M GOING TO ASK EACH OF YOU TO DO IN TURN, STARTING  
11 WITH JUROR NUMBER 1, WORKING OUR WAY THROUGH TO JUROR NUMBER  
12 45, IS TO STAND AND RECITE THE ANSWER TO EACH OF THESE  
13 QUESTIONS IN ORDER.

14 IT SOUNDS A LITTLE TEDIOUS. IT WILL GO RELATIVELY  
15 SMOOTHLY IF WE ALL JUST WORK OUR WAY THROUGH THESE QUESTIONS  
16 ONE BY ONE.

17 TO GIVE EACH OF YOU A SENSE OF HOW I WANT THIS INFORMATION  
18 CONVEYED, I WILL DEMONSTRATE USING MYSELF AS A JUROR.

19 SO WITH THAT, LET ME STAND UP. AND I WANT EACH OF YOU TO  
20 STAND UP WHEN IT'S YOUR TURN SO THAT THE LAWYERS CAN HEAR AND  
21 THE COURT REPORTER CAN HEAR CLEARLY.

22 MY NAME IS PAUL GREWAL AND I AM THE JUDGE IN THIS CASE,  
23 BUT I'M PRETENDING TO BE A JUROR FOR THE MOMENT. I WAS BORN IN  
24 CINCINNATI, OHIO AND I NOW LIVE IN PALO ALTO, CALIFORNIA. I'VE  
25 LIVED HERE IN NORTHERN CALIFORNIA FOR APPROXIMATELY 16 YEARS,

1 GIVE OR TAKE.

2 I LIVE WITH MY WIFE AND MY TWO CHILDREN. MY OLDER CHILD  
3 IS A BOY, AGE 12, MY YOUNGER CHILD IS A GIRL, AGE 5.

4 AS FAR AS MY EDUCATIONAL BACKGROUND GOES, I HAVE AN  
5 UNDERGRADUATE DEGREE FROM THE MASSACHUSETTS INSTITUTE OF  
6 TECHNOLOGY. I RECEIVED MY LAW DEGREE FROM THE UNIVERSITY OF  
7 CHICAGO LAW SCHOOL.

8 MY CURRENT OCCUPATION IS JUDGE. I WORK HERE IN THE  
9 NORTHERN DISTRICT OF CALIFORNIA.

10 AS FOR SPECIAL SKILLS OR SPECIAL TRAINING, IN AN EARLIER  
11 LIFE I DID A BIT OF COMPUTER PROGRAMMING, BUT THOSE DAYS HAVE  
12 LONG SINCE PASSED.

13 MY WIFE DOES WORK. SHE CURRENTLY IS EMPLOYED BY SYMANTEC  
14 CORPORATION WHERE SHE WORKS AS A PRODUCT MANAGER FOR A SOFTWARE  
15 PRODUCT.

16 MY CHILDREN ARE NOT YET EMPLOYED, BUT I HAVE HIGH HOPES.

17 (LAUGHTER.)

18 THE COURT: AND AS FAR AS MY FAVORITE HOBBY OR  
19 RECREATIONAL ACTIVITY GOES, THIS TIME OF YEAR IT WOULD HAVE TO  
20 BE WATCHING THE SAN FRANCISCO 49ERS, SO TODAY WAS A TOUGH,  
21 TOUGH DAY.

22 ALL RIGHT. WITH THAT, JUROR NUMBER 1, WOULD YOU PLEASE  
23 PROCEED?

24 AND MR. RIVERA WILL BE PASSING OUT A MICROPHONE. JUST DO  
25 YOUR BEST TO KEEP YOUR VOICE UP SO EVERYBODY CAN HEAR. THANK

1 YOU.

2 PROSPECTIVE JUROR: MY FRAME IS FRANCISCO WESTON. I  
3 WAS BORN IN REDWOOD CITY, CALIFORNIA. I LIVE IN SAN JOSE,  
4 CALIFORNIA NOW. I'VE LIVED IN CALIFORNIA MY WHOLE LIFE.

5 I LIVE WITH MY WIFE AND TWO CHILDREN WHO ARE -- MY  
6 DAUGHTER IS AGE 21 AND MY SON IS AGE 9.

7 HIGH SCHOOL EDUCATION.

8 AND I AM A WOODWORKER. WE MANUFACTURE WOOD PRODUCTS. ALL  
9 OF THE HAND RAILS AND WOODWORKING HERE COMES THROUGH BIG  
10 MACHINERY AND THAT'S WHAT I MAKE.

11 SPECIAL SKILLS WOULD BE WOODWORKING.

12 LET'S SEE. MY WIFE IS A TEACHER'S AID IN SAN JOSE UNIFIED  
13 SCHOOL DISTRICT. AND MY DAUGHTER IS STILL IN COLLEGE. SHE  
14 GOES TO SANTA CLARA UNIVERSITY. AND MY NINE YEAR OLD IS STILL  
15 LIVING AT HOME.

16 AND MY FAVORITE HOBBY WOULD BE RESTORING OLD CARS.

17 THE COURT: THANK YOU VERY MUCH, JUROR NUMBER 1.

18 JUROR NUMBER 2, GOOD MORNING, SIR.

19 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS  
20 PETER MOORE. I'M JUROR NUMBER 2. I WAS BORN IN PRINCETON,  
21 NEW JERSEY. I LIVE NOW IN MOUNTAIN VIEW. I'VE BEEN IN  
22 NORTHERN CALIFORNIA FOR AROUND 35 YEARS.

23 AND I LIVE WITH MY WIFE, NO CHILDREN.

24 MY EDUCATIONAL BACKGROUND, I WENT -- UNDERGRADUATE DEGREE  
25 FROM PRINCETON IN PHYSICS, AND MY GRADUATE WORK WAS FIRST IN

1 PHYSICS AND THEN I SWITCHED TO CAD FOR IC, INTEGRATED CIRCUIT  
2 DESIGN.

3 I WORK AT ORACLE CORPORATION. I'M AN ARCHITECT IN THE  
4 SOCIAL CRM PRODUCT, WHICH IS A CONSUMER RELATION MANAGEMENT  
5 SOFTWARE PRODUCT WE BUILD.

6 SPECIAL SKILLS ARE PROBABLY PROGRAMMING.

7 MY WIFE WORKS AS A RESEARCH LAB TECHNICIAN AT STANFORD  
8 UNIVERSITY.

9 AND FAVORITE HOBBY IS READING AND OCCASIONAL TRAVEL.

10 THE COURT: THANK YOU JUROR NUMBER 2.

11 JUROR NUMBER 3, GO AHEAD, SIR.

12 PROSPECTIVE JUROR: HI. MY NAME IS SANTINO RIVERA.

13 I WAS BORN IN SAGINAW, MICHIGAN. NOW LIVE IN SANTA CLARA,  
14 CALIFORNIA. BEEN IN NORTHERN CALIFORNIA FOR ABOUT 40 YEARS.

15 LIVE WITH MY PARTNER, OVER 14 YEARS. I HAVE ONE CHILD  
16 WHO'S 23, OUT OF THE HOUSE NOW.

17 I HAVE A HIGH SCHOOL BACKGROUND.

18 I WORK IN HIGH TECH SOFTWARE DEVELOPMENT. I'M A  
19 PROCUREMENT MANAGER.

20 AND NO SPECIAL SKILLS.

21 MY PARTNER IS A GENERAL CONTRACTOR IN RESIDENTIAL  
22 REMODELING.

23 MY SON WORKS FOR GOOGLE.

24 AND MY HOBBIES ARE READING AND GARDENING.

25 THE COURT: THANK YOU VERY MUCH.

1 JUROR NUMBER 4.

2 PROSPECTIVE JUROR: HI. MY NAME IS CAROL PLUFF,  
3 JUROR NUMBER 4. I WAS BORN IN SAN JOSE. RESIDE IN  
4 SANTA CLARA. I'VE LIVED IN NORTHERN CALIFORNIA ALL MY LIFE.

5 I RESIDE WITH MY HUSBAND AND ONE DAUGHTER WHO IS A JUNIOR,  
6 17.

7 I HAVE SOME COLLEGE EDUCATION. I CURRENTLY WORK FOR A  
8 COMPANY CALLED PACTRUST, WHICH IS A COMMERCIAL REAL ESTATE  
9 PROPERTY MANAGER, AND I DO THEIR LEASING CONTRACTS AND I DRAFT  
10 THE CONTRACTS AND THEN MEET WITH THE CLIENTS THAT ARE POTENTIAL  
11 TENANTS.

12 MY HUSBAND OWNS A GENERAL CONTRACTING FIRM HERE IN  
13 SANTA CLARA.

14 DAUGHTER IS A JUNIOR, NOT EMPLOYED. BUT HOPEFUL, TOO.

15 (LAUGHTER.)

16 PROSPECTIVE JUROR: AND HOBBIES, I LIKE TO READ AND  
17 COOK.

18 THE COURT: THANK YOU VERY MUCH.

19 JUROR NUMBER 5, GO AHEAD, SIR.

20 PROSPECTIVE JUROR: MY NAME IS BRETT IWAHASHI. I'M  
21 JUROR NUMBER 5. I WAS BORN IN SANTA CLARA. I LIVE IN  
22 CUPERTINO NOW. I'VE LIVED HERE FOR 28 YEARS.

23 I LIVE WITH MY MOTHER AND FATHER. NO CHILDREN.

24 BACHELOR'S DEGREE IN BUSINESS FROM SAN JOSE STATE AND I'M  
25 CURRENTLY AN ASSOCIATE COORDINATOR FOR WHOLE FOODS MARKET.

1 NO SPECIAL SKILLS.

2 AND NOT MARRIED, AND NO CHILDREN.

3 AND FAVORITE HOBBY IS GOING TO THE GYM.

4 THE COURT: THANK YOU.

5 GOOD MORNING, JUROR NUMBER 6.

6 PROSPECTIVE JUROR: HI. GOOD MORNING. MY NAME IS  
7 ALYCIA OSBORNE. I'M JUROR NUMBER 6. I WAS BORN IN SACRAMENTO,  
8 CALIFORNIA. I NOW LIVE IN SAN JOSE. I'VE LIVED IN NORTHERN  
9 CALIFORNIA FOR ABOUT 20 YEARS, NOT CONSECUTIVELY.

10 I LIVE WITH MY HUSBAND AND MY THREE YEAR OLD DAUGHTER.  
11 SHE'S A GIRL. SHE'S THREE.

12 I HAVE AN UNDERGRADUATE DEGREE FROM SAN DIEGO STATE  
13 UNIVERSITY.

14 I WORK IN HUMAN RESOURCES AS A BENEFITS ANALYST FOR  
15 LINKEDIN CORPORATION.

16 I DO HAVE -- DO NOT HAVE ANY SPECIAL SKILLS OR TRAINING.

17 MY HUSBAND IS AN ENGINEER. HE WORKS FOR APPLE, INC.

18 MY DAUGHTER DOES A LOT OF THINGS, NOT MANY VERY WELL, BUT  
19 SHE'S NOT EMPLOYED.

20 (LAUGHTER.)

21 PROSPECTIVE JUROR: I LIKE TO PLAY GOLF AND DO YOGA.

22 THE COURT: THANK YOU VERY MUCH, JUROR NUMBER 6.

23 JUROR NUMBER 7, GO AHEAD, MA'AM.

24 PROSPECTIVE JUROR: MY NAME IS DONNA NAPPI. I'M  
25 JUROR NUMBER 7. I WAS BORN IN SAN FRANCISCO. I LIVE IN



1 SUNNYVALE. I'VE LIVED IN CALIFORNIA ALL MY LIFE.

2 AND WHO RESIDES WITH ME, JUST ME AND MY BIRD.

3 I HAVE FOUR CHILDREN. THEY RANGE FROM 51 TO 37.

4 MY EDUCATIONAL BACKGROUND IS I GRADUATED FROM HIGH SCHOOL.

5 NO SPECIAL SKILLS.

6 MY HUSBAND IS -- WAS RETIRED AND WAS A HEAVY EQUIPMENT  
7 OPERATOR.

8 MY OLDEST DAUGHTER LIVES IN RENO; AND MY SECOND DAUGHTER  
9 WORKS WITH -- TAKES CARE OF THE ELDERLY; MY SON IS A SECURITY  
10 GUARD; MY YOUNGEST DAUGHTER IS A NURSE.

11 AND MY ACTIVITIES ARE READING AND PLAYING WITH MY BIRD  
12 FRED.

13 THE COURT: THANK YOU VERY MUCH, JUROR NUMBER 7.

14 IF YOU COULD JUST PASS DOWN THE MICROPHONE TO JUROR NUMBER  
15 8, I SURE WOULD APPRECIATE IT.

16 JUROR NUMBER 8, GOOD MORNING AGAIN.

17 PROSPECTIVE JUROR: HI, GOOD MORNING. MY NAME IS  
18 KEMING WONG. MY JUROR NUMBER IS 8. I WAS BORN IN DANYANG,  
19 CHINA. RIGHT NOW I'M LIVING IN SAN JOSE. I HAVE BEEN HERE  
20 SINCE 1995, SO 18 YEARS.

21 I'M LIVING WITH MY WIFE AND MY SON WHO IS JUNIOR, 16  
22 YEARS. AND MY DAUGHTER IS 28 YEARS. SHE LIVE IN HER  
23 APARTMENT.

24 I GOT A BACHELOR AND MASTER'S DEGREE IN ELECTRONIC  
25 ENGINEERING. I'M DOING THE DESIGN ENGINEER FOR INTEGRATED

1 CIRCUITS IN BROADCOM.

2 AND ALSO I GOT -- YEAH. I GOT -- I HAVE EXPERIENCE IN  
3 EXCHANGE STUDENTS IN GERMANY.

4 MY WIFE IS A SEMICONDUCTOR ENGINEER IN PERICOM  
5 SEMICONDUCTOR COMPANY, CORPORATION.

6 MY DAUGHTER IS ALSO AN ENGINEER IN GOOGLE.

7 AND I LIKE TO PLAY SOCCER AND VOLLEYBALL AND SOMETIMES  
8 ALSO TO HAVE BALLROOM DANCE. YEAH.

9 DURING THE WEEKEND, I DO A LOT OF BACKYARD WORK.

10 THE COURT: THANK YOU VERY MUCH JUROR NUMBER 8.

11 JUROR NUMBER 9, GO AHEAD, SIR.

12 PROSPECTIVE JUROR: MY NAME IS JOSEPH NOIA. I'M  
13 JUROR NUMBER 9. I WAS BORN IN THE AZORES, PORTUGAL. I'VE  
14 LIVED IN CALIFORNIA FOR 52 YEARS.

15 I RESIDE IN SANTA CLARA WITH MY WIFE OF 46 YEARS. I HAVE  
16 TWO CHILDREN, TWO BOYS, 40 AND 41.

17 I DID SOME COLLEGE STUDIES ON ANIMAL BEHAVIOR.

18 LET'S SEE. I DO PRISON WORK AS A FACILITIES ENGINEER  
19 MANAGER FOR NORTH AMERICA. I TOOK SPECIAL SKILLS AND  
20 CONTINUING EDUCATION FOR THE PRISON JOB THAT I HAVE.

21 MY WIFE IS A RETIRED SCHOOL TEACHER WITH SANTA CLARA  
22 SCHOOL DISTRICT FOR 35 YEARS.

23 AND MY TWO CHILDREN, ONE IS A MARKET MANAGER FOR SAP, AND  
24 THE OTHER ONE IS AN ENGINEER FOR ACTIVE PHARMACEUTICALS IN  
25 SUNNYVALE.

1 AND I RIDE MY BIKE AND I READ AND I DO HORSE RIDING.

2 THE COURT: THANK YOU, NUMBER 9.

3 JUROR NUMBER 10, GO AHEAD, SIR.

4 PROSPECTIVE JUROR: HI. MY NAME IS DANA NELSON. I'M  
5 JUROR NUMBER 10. I WAS BORN IN ALAMEDA. I LIVE IN MORGAN  
6 HILL. I'VE BEEN HERE FOR THE LAST 32 YEARS.

7 MY WIFE RESIDES WITH ME AT THE MOMENT. I HAVE --

8 (LAUGHTER.)

9 PROSPECTIVE JUROR: WELL, KIDS KEEP COMING AND GOING.

10 (LAUGHTER.)

11 PROSPECTIVE JUROR: I HAVE HAD FIVE CHILDREN, FOUR  
12 ARE OF WHICH ARE ALIVE. I HAVE TWO 38 YEAR OLD TWIN GIRLS, I  
13 HAVE A 35 YEAR OLD DAUGHTER, AND A 33 YEAR OLD SON. HE AND HIS  
14 WIFE JUST HAD MY 12TH GRANDCHILD.

15 I HAVE HIGH SCHOOL BACKGROUND, MILITARY TRAINING IN  
16 ELECTRONICS.

17 MY OCCUPATION IS I WORK FOR A CONTRACT HOUSE WITH -- FOR  
18 IBM. I'M WHAT THEY CALL AN EMERGENCY RESPONSE MANAGER. WHEN  
19 ENTERPRISE CUSTOMERS GO DOWN FOR ANY PERIOD OF TIME, THEY'RE  
20 REQUIRED TO ENGAGE OUR TEAM. AT THAT POINT WE TAKE OVER  
21 RESPONSIBILITY FOR EXECUTIVE MANAGEMENT UPDATING, TECH SUPPORT  
22 FOLKS, WHATEVER IT TAKES TO GET THE CUSTOMER BACK UP AND  
23 RUNNING.

24 I HAVE NO PARTICULAR SPECIAL SKILLS.

25 MY WIFE IS A TEACHER'S AID FOR A CHILD WITH NEEDS IN

1 MORGAN HILL UNIFIED SCHOOL DISTRICT.

2 MY KIDS ARE ALL EMPLOYED.

3 AND MY FAVORITE HOBBIES ARE WHITE WATER RAFTING AND  
4 GARDENING.

5 THE COURT: CAN I -- THANK YOU VERY MUCH, JUROR  
6 NUMBER 10. MAY I ASK, SIR, YOU MENTIONED YOUR CHILDREN ARE  
7 EMPLOYED. CAN YOU TELL US WHAT KIND OF WORK THEY DO?

8 PROSPECTIVE JUROR: ONE OF THEM IS AN ON-LINE TEACHER  
9 DOWN IN SOUTHERN CALIFORNIA; ONE IS A STAY AT HOME MOM; AND MY  
10 SON IS A PRODUCTION MANAGER OF A GAME DEVELOPMENT --

11 THE COURT: A VIDEO GAME COMPANY OF SOME KIND?

12 PROSPECTIVE JUROR: WHAT'S THAT?

13 THE COURT: A VIDEO GAME COMPANY OF SOME KIND?

14 PROSPECTIVE JUROR: YES, IT IS, A GAMES COMPANY.  
15 THEY DID THE NFL GAME, SOMETHING ELSE. I GET THEM ALL -- OH,  
16 AND MY OTHER DAUGHTER IS THE SHERIFF'S SECRETARY.

17 THE COURT: THANK YOU VERY MUCH, SIR.

18 PROSPECTIVE JUROR: YOU BET.

19 THE COURT: JUROR NUMBER 11.

20 PROSPECTIVE JUROR: HI. I'M FLORENTINO HERNANDEZ.  
21 I'M NUMBER 11. I WAS BORN IN MEXICO. I NOW LIVE IN  
22 MOUNTAIN VIEW, CALIFORNIA. I'VE LIVED HERE FOR 33 YEARS.

23 AND I LIVE WITH MY PARTNER. NO CHILDREN.

24 ASSOCIATE'S DEGREE IN BUSINESS. I WORK FOR LOCKHEED  
25 MARTIN AND I'M A TRAVEL COORDINATOR, BOOKING TRAVEL AND PROCESS

1 EXPENSE REPORTS.

2 NO SPECIAL SKILLS OR TRAINING.

3 MY PARTNER WORKS AT EASTER SEALS. HE'S A PSYCHOLOGIST.

4 AND I LIKE TO COOK AND SWIM.

5 THE COURT: THANK YOU VERY MUCH, SIR.

6 JUROR NUMBER 12, PLEASE GO AHEAD.

7 PROSPECTIVE JUROR: MY NAME IS DAWN YEARMAN. I'M

8 JUROR NUMBER 12. I WAS BORN IN ELGIN, ILLINOIS. I LIVE IN

9 SAN JOSE. I'VE BEEN IN NORTHERN CALIFORNIA FOR 31 YEARS.

10 MY DOG LIVES WITH ME. NO CHILDREN.

11 I HAVE AN ASSOCIATE'S AGREE IN BUSINESS.

12 I'M A SOLE PROPRIETOR AND OWN MY OWN DRY CLEANERS.

13 MY SPECIAL SKILLS ARE TAILORING, WORKING WITH CHEMICALS IN  
14 THE DRY CLEANING, WORKING WITH DRY CLEANING MACHINES.

15 AND MY FAVORITE HOBBIES ARE BIKE RIDING, SEWING,  
16 CROCHETING, KNITTING.

17 THE COURT: JUROR NUMBER 12, I'M GOING TO GIVE YOU A  
18 CHANCE TO PROMOTE YOUR BUSINESS. WHAT'S THE NAME OF YOUR DRY  
19 CLEANER?

20 PROSPECTIVE JUROR: CAMPBELL PLAZA CLEANERS.

21 THE COURT: THANK YOU, MA'AM.

22 JUROR NUMBER 13, GO AHEAD, PLEASE.

23 PROSPECTIVE JUROR: MY NAME IS LINDSAY WAHLER. I'M

24 JUROR NUMBER 13. I WAS BORN IN MOUNTAIN VIEW, CALIFORNIA. I

25 LIVE IN SANTA CLARA. I'VE LIVED HERE FOR 37 YEARS, ALL MY

1 LIFE.

2 I LIVE WITH MY HUSBAND AND TWO KIDS. THEIR AGES ARE TWO  
3 AND EIGHT.

4 I WENT TO SAN JOSE STATE. I HAVE MY DEGREE, BACHELOR OF  
5 SCIENCE DEGREE IN PUBLIC RELATIONS.

6 CURRENT OCCUPATION IS OFFICE/COMMUNICATIONS MANAGER AT A  
7 START-UP COMPANY CALLED GRABIT INCORPORATED, WHICH I DON'T KNOW  
8 IF IT'S TOO LATE TO MENTION AN UNDUE HARDSHIP, BUT I JUST  
9 STARTED THERE A FEW WEEKS AGO AFTER BEING LAID OFF FOR ABOUT A  
10 YEAR, AND WE'RE SORT OF FINALIZING FOR AN ANNOUNCEMENT THAT WE  
11 HAVE IN THE NEXT WEEK OR TWO, SO IT WOULD BE A LITTLE BIT HARD  
12 TO MISS WORK.

13 GOING ON, I'LL SKIP NUMBER 9.

14 NUMBER 10, MY HUSBAND IS AN ELECTRICAL CONTRACTOR WHO OWNS  
15 HIS OWN BUSINESS. MY KIDS ARE OBVIOUSLY NOT EMPLOYED.

16 AND MY HOBBIES ARE WORKING OUT AND NOT MUCH TIME FOR  
17 HOBBIES, SPENDING TIME WITH MY KIDS OBVIOUSLY AT THEIR AGES.

18 THANKS.

19 THE COURT: THANK YOU. JUROR NUMBER 14, GO AHEAD,  
20 MA'AM.

21 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS  
22 SYLVIA MORA. I'M JUROR NUMBER 14. I WAS BORN IN BAKERSFIELD.  
23 I LIVE NOW IN SALINAS AND I HAVE FOR THE PAST 24 YEARS.

24 MY HUSBAND AND MY SON LIVE WITH ME. AND I HAVE TWO BOYS,  
25 AGES 21 AND 18.

1 MY EDUCATIONAL BACKGROUND IS ASSOCIATE'S DEGREE. I WORK  
2 FOR SALINAS ELEMENTARY SCHOOL DISTRICT AS AN ENGLISH LEARNER  
3 LIAISON. I HAVE NO SPECIAL SKILLS.

4 MY HUSBAND WORKS FOR D'ARRIGO BROTHERS OF CALIFORNIA. HIS  
5 TITLE IS PRODUCTION MANAGER.

6 AND MY FAVORITE HOBBY IS NATURE WALKS.

7 THE COURT: JUROR NUMBER 14, MAY I ASK YOU, MA'AM,  
8 DID I TAKE NOTES CORRECTLY EARLIER THAT YOU SAID YOU HAD --  
9 THAT YOU WERE TAKING SOME CLASSES?

10 PROSPECTIVE JUROR: YES.

11 THE COURT: AND THOSE ARE -- WHAT KIND OF CLASSES ARE  
12 YOU TAKING?

13 PROSPECTIVE JUROR: SOCIOLOGY.

14 THE COURT: OKAY.

15 PROSPECTIVE JUROR: AT CSUB.

16 THE COURT: ALL RIGHT. I APPRECIATE THAT. THANK  
17 YOU, MA'AM.

18 THANK YOU, MR. RIVERA.

19 JUROR NUMBER 15, ONCE YOU HAVE THE MICROPHONE, THE FLOOR  
20 WILL BE YOURS.

21 GO AHEAD, MA'AM.

22 PROSPECTIVE JUROR: I'M JUROR 15. MY NAME IS  
23 PATTY SCOTT. I WAS BORN IN SAN JOSE AND I LIVE IN SAN JOSE.  
24 I'VE LIVED HERE FOR 50 YEARS.

25 I LIVE BY MYSELF. I HAVE A 19 YEAR OLD SON.

1 I HAVE A BACHELOR'S DEGREE IN ACCOUNTING FROM SAN JOSE  
2 STATE. I DO CORPORATE REVENUE PLANNING AND ANALYSIS AND  
3 OPERATIONAL BUDGET DEVELOPMENT FOR M.A. TRANSACTIONS AT MCAFEE.

4 I HAVE NO SPECIAL SKILLS TO CALL OUT.

5 MY EX-HUSBAND IS A SITE SERVICES MANAGER AT IBM.

6 MY SON IS A FULL-TIME STUDENT AT CHICO STATE.

7 AND FOR RECREATION I LIKE TO HIKE AND DO WINE TASTING.

8 THE COURT: THANK YOU, JUROR NUMBER 15.

9 JUROR NUMBER 16, GO AHEAD, SIR.

10 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS  
11 KENT CASKEY. I WAS BORN IN CORPUS CHRISTI, TEXAS. I NOW LIVE  
12 IN CAMPBELL, CALIFORNIA WHERE I'VE BEEN FOR 33 YEARS.

13 MY WIFE AND MY TWO GROWN SONS BOTH LIVE WITH ME. MY  
14 CHILDREN ARE 29 AND 27 AND STILL LIVING AT HOME. HOW DID THAT  
15 HAPPEN?

16 (LAUGHTER.)

17 PROSPECTIVE JUROR: I HAVE A BACHELOR'S DEGREE IN  
18 BUSINESS ADMINISTRATION AND I'M A SENIOR CONSTRUCTION MANAGER  
19 FOR CJ CONTRACTING.

20 MY SPECIAL SKILLS, I'M A CREW CHIEF AND INSTRUCTOR FOR  
21 ALL OF THE BASEBALL UMPIRES AND FOOTBALL OFFICIALS IN  
22 SANTA CLARA COUNTY.

23 MY WIFE IS A SALES ASSOCIATE FOR BROOKS BROTHERS.

24 MY OLDER SON IS A SUBSTITUTE TEACHER. MY YOUNGER SON IS A  
25 CONSTRUCTION WORKER.



1 AND OBVIOUSLY MY FAVORITE HOBBY OR RECREATIONAL ACTIVITY  
2 IS OFFICIATING HIGH SCHOOL SPORTS.

3 THANK YOU.

4 THE COURT: THANK YOU VERY MUCH, SIR.

5 JUROR NUMBER 17, GO AHEAD, MA'AM.

6 PROSPECTIVE JUROR: HI. I'M DESIREE CHILDRESS, JUROR  
7 NUMBER 17. I WAS BORN IN NYACK, NEW YORK AND NOW I'M LIVING IN  
8 SAN JOSE FOR THE LAST 14 YEARS.

9 I LIVE WITH MY HUSBAND AND MY SON WHO IS 16 AND A SENIOR IN  
10 HIGH SCHOOL. I HAVE TWO CHILDREN, A DAUGHTER WHO'S 20 WHO'S  
11 NOW AT ARIZONA STATE, AND MY SON WHO'S 16.

12 I HAVE A BACHELOR'S FROM CLARK UNIVERSITY IN WORCESTER,  
13 MASSACHUSETTS IN GOVERNMENT AND WOMEN'S STUDIES, AND THEN A  
14 PH.D. IN ECONOMIC SOCIOLOGY AT THE JOHNS HOPKINS UNIVERSITY IN  
15 BALTIMORE.

16 I'M CURRENTLY WITH APPLE RETAIL AND I'M IN CUSTOMER  
17 SERVICE TRAINING AND SALES.

18 NO PARTICULAR SKILLS.

19 MY HUSBAND WORKS FOR HGST. HE'S A RESEARCH STAFF MEMBER  
20 AND MANAGER.

21 AND NO EMPLOYED CHILDREN YET, BUT HOPEFULLY SOON.

22 AND MY FAVORITE HOBBY IS READING CRIMINAL NOVELS AND  
23 WATCHING SOCCER.

24 THE COURT: THANK YOU VERY MUCH, JUROR NUMBER 17.

25 GO AHEAD, JUROR NUMBER 18.

1 PROSPECTIVE JUROR: HELLO. MY NAME IS DIANE TERRY.  
2 I WAS -- I'M JUROR NUMBER 18. I WAS BORN HERE IN SAN JOSE. I  
3 GREW UP IN WILLOW GLEN. I NOW LIVE IN SOUTH SALINAS AND I HAVE  
4 SPENT ALL 62 YEARS IN NORTHERN CALIFORNIA.

5 I LIVE ALONE. I HAVE NO CHILDREN.

6 I WENT BACK TO COLLEGE WHEN I WAS 46 AND GOT A BACHELOR'S  
7 DEGREE IN COMMERCIAL RECREATION ADMINISTRATION. I WORK AT  
8 SEASCAPE RESORT AND I WORK IN THEIR CORPORATE SALES OFFICE.

9 NO SPECIAL SKILLS.

10 MY EX-HUSBAND, I REALLY DON'T KNOW WHAT HE DOES ANYMORE.

11 (LAUGHTER.)

12 PROSPECTIVE JUROR: I APOLOGIZE. I DON'T KEEP UP.

13 BUT WE DID OWN OUR OWN CONSULTING FIRM FOR COMMERCIAL  
14 ROOFING AND WATERPROOFING.

15 I DO NOT HAVE CHILDREN.

16 AND MY FAVORITE HOBBIES AND RECREATIONAL ACTIVITIES ARE  
17 RUNNING AND PLAYING GOLF.

18 THE COURT: THANK YOU, MA'AM.

19 JUROR NUMBER 19, GO AHEAD, SIR.

20 PROSPECTIVE JUROR: MY NAME IS JAMES MCDERMOTT, JUROR  
21 19. I WAS BORN IN RUNNEMEDE, NEW JERSEY. I CURRENTLY LIVE IN  
22 SAN JOSE. I'VE BEEN IN CALIFORNIA FOR 33 YEARS.

23 I LIVE WITH MY WIFE, MY MOTHER-IN-LAW, AND BROTHER-IN-LAW  
24 AND MY GRANDSON. HE'S AGE FIVE. WE HAVE ONE DAUGHTER WHO'S  
25 24.

1 I'VE GOT A B.S. DEGREE FROM RUTGERS UNIVERSITY. I WORK  
2 AT -- AS A PRODUCT ENGINEER AT LINEAR TECHNOLOGY.

3 NO REAL SPECIAL SKILLS.

4 MY WIFE IS UNEMPLOYED.

5 OUR DAUGHTER WORKS AS AN LVN AT A NURSING HOME. SHE JUST  
6 STARTED AT A NEW PLACE, SO I'M NOT SURE OF THE NAME OF IT. SHE  
7 USED TO WORK AT CRESTWOOD, BUT THAT WAS BEFORE.

8 FAVORITE HOBBY IS MUSIC, STOCK MARKET.

9 THE COURT: THANK YOU, JUROR NUMBER 19. MAY I ASK  
10 YOU, SIR, BEFORE YOU PASS THE MIKE, YOU SAID THAT YOU WORK AT  
11 LINEAR.

12 PROSPECTIVE JUROR: YES.

13 THE COURT: WHAT KIND OF -- DO YOU WORK IN  
14 ENGINEERING THERE? WHAT KIND OF WORK DO YOU DO?

15 PROSPECTIVE JUROR: MY TITLE IS PRODUCT ENGINEER, SO  
16 BASICALLY FOR ANALOG DEVICES, WE -- I'M RESPONSIBLE FOR  
17 BRINGING IN NEW PRODUCTS, AS WELL AS MAINTAINING EXISTING  
18 PRODUCTS, MAKE SURE THE YIELDS ARE UP.

19 THE COURT: ALL RIGHT. I APPRECIATE THAT, SIR.  
20 THANK YOU.

21 JUROR NUMBER 20, GOOD MORNING, SIR.

22 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS  
23 SAM SIN. I'M JUROR NUMBER 20. I WAS BORN IN MACAU, PART OF  
24 THE CHINA. I LIVE IN SAN JOSE. I'VE LIVED HERE FOR 20 YEARS.

25 I LIVE BY MYSELF. NO KIDS.

1 I GOT A DOCTORATE DEGREE FROM U.C. IRVINE AND  
2 UNDERGRADUATE FROM TAIWAN, NATIONAL TAIWAN UNIVERSITY FOR MY  
3 UNDERGRAD. ELECTRICAL ENGINEERING.

4 AND I'M THE CO-FOUNDER OF A SMALL START-UP COMPANY MAKING  
5 SOME APPLIANCES, NETWORKING APPLIANCES.

6 MY SPECIAL SKILLS IS SOFTWARE DEVELOPMENT, SOFTWARE  
7 ARCHITECTURE.

8 AND I'M DIVORCED. MY WIFE, SHE WAS A SOFTWARE ENGINEER.  
9 AND NO KIDS.

10 AND MY HOBBY IS PLAYING GOLF AND GO TO THE MOVIES.

11 THE COURT: THANK YOU, JUROR NUMBER 21.

12 JUROR NUMBER 21, GO AHEAD, MA'AM.

13 PROSPECTIVE JUROR: MY NAME IS DONNA BECKER AND I'M  
14 JUROR NUMBER 21. I WAS BORN IN HIBBING, MINNESOTA. I NOW LIVE  
15 IN SANTA CRUZ, CALIFORNIA. I'VE BEEN IN NORTHERN CALIFORNIA  
16 FOR 30 YEARS.

17 I LIVE WITH MY HUSBAND AND HALF TIME WITH MY 27 YEAR OLD  
18 SON AND MY THREE YEAR OLD GRANDDAUGHTER. I HAVE TWO CHILDREN,  
19 A DAUGHTER 25 AND A SON 27.

20 I HAVE A B.A. FROM YALE UNIVERSITY AND A MASTER'S IN  
21 SOCIAL WORK AND A J.D. FROM BERKELEY.

22 I WORK -- I HAVE MY OWN FAMILY LAW PRACTICE SPECIALIZING,  
23 TO THE EXTENT POSSIBLE, IN COLLABORATION AND MEDIATION.

24 MY HUSBAND IS A BUSINESS CONSULTANT IN ORGANIZATIONAL  
25 DEVELOPMENT. HE'S CURRENTLY WORKING WITH A COMPANY OUT OF

1 SACRAMENTO CALLED LEADERSHIP ONE.

2 MY 27 YEAR OLD SON IS CURRENTLY WORKING AS AN AID IN  
3 OBTAINING HIS MASTER'S DEGREE IN COUNSELLING FROM JFK  
4 UNIVERSITY, AND MY 25 YEAR OLD DAUGHTER LIVES IN DUSSELDORF AND  
5 IS WORKING IN MARKETING FOR WITH A TRAVEL COMPANY CALLED  
6 TRIVAGO.

7 MY HOBBIES ARE POETRY WRITING AND GARDENING AND DRAWING.

8 THE COURT: THANK YOU VERY MUCH, JUROR NUMBER 21.

9 JUROR NUMBER 22, GO AHEAD SIR.

10 PROSPECTIVE JUROR: MY NAME IS LIU PAN AND I'M NUMBER  
11 22 AND I WAS BORN IN CHINA. I LIVE RIGHT NOW IN CUPERTINO,  
12 CALIFORNIA. SO I HAVE LIVED HERE IN NORTHERN CALIFORNIA FOR  
13 THE LAST 13 YEARS.

14 AND I LIVE WITH MY WIFE AND TWO KIDS. THE DAUGHTER, MY  
15 DAUGHTER IS 11 YEARS OLD AND MY SON IS FIVE.

16 SO I HAVE A MASTER'S IN COMPUTER SCIENCE AND A PH.D. IN  
17 MATHEMATICS, BOTH FROM UNIVERSITY OF PENNSYLVANIA.

18 SO I'M -- RIGHT NOW I'M A SOFTWARE ARCHITECT AT  
19 CHARGEPOINT. WE MAKE ELECTRONIC VEHICLE CHARGING STATIONS. SO  
20 I'M ACTUALLY WORKING ON THAT FOR CHARGEPOINT.

21 SO MY SPECIAL SKILL WOULD BE SOFTWARE DESIGN AND  
22 DEVELOPMENT.

23 MY WIFE IS AN I.T. MANAGER FOR H-P. AND I DON'T HAVE ANY  
24 EMPLOYED CHILDREN.

25 SO MY HOBBY WOULD BE SWIMMING, PING PONG, AND SOCCER.

1 THE COURT: THANK YOU, SIR.

2 JUROR NUMBER 23, GO AHEAD, SIR.

3 PROSPECTIVE JUROR: HI. MY NAME IS BRIAN JOHNSON,  
4 I'M JUROR NUMBER 23. I WAS BORN IN SANTA CRUZ. I CURRENTLY  
5 LIVE IN CAMPBELL. I'VE LIVED IN NORTHERN CALIFORNIA ALL MY  
6 LIFE, EXCEPT FOR SIX YEARS WHEN I LIVED IN NORTHERN CALIFORNIA.

7 I CURRENTLY LIVE WITH MY FIANCEE. WE HAVE NO KIDS.

8 I GRADUATED FROM UCLA AND I GOT MY J.D. AT SANTA CLARA  
9 UNIVERSITY. I'M CURRENTLY GENERAL COUNSEL FOR ARACELI CAFE.

10 I HAVE NO SPECIAL SKILLS OR SPECIAL TRAINING.

11 MY FIANCEE WORKS AT RED CROSS OF SILICON VALLEY.

12 AND MY FAVORITE HOBBY IS PROBABLY RUNNING AND READING.

13 THE COURT: THANK YOU VERY MUCH, SIR.

14 JUROR NUMBER 24, GO AHEAD, MA'AM.

15 PROSPECTIVE JUROR: I'M LORI JAIN, JUROR NUMBER 24.

16 I WAS BORN IN SAN JOSE. I LIVE IN SANTA CLARA, AND I'VE LIVED  
17 IN NORTHERN CALIFORNIA MY WHOLE LIFE.

18 I RESIDE WITH MY HUSBAND AND SON. MY SON IS 14 YEARS  
19 OLD.

20 I HAVE AN UNDERGRADUATE DEGREE IN ACCOUNTING AND AN  
21 M.B.A. I AM AN ACCOUNTING SYSTEMS MANAGER AT SANTA CLARA  
22 UNIVERSITY.

23 I HAVE NO SPECIAL SKILLS.

24 MY HUSBAND RETIRED FROM HIS POSITION AT BROADCOM AS AN  
25 ELECTRICAL ENGINEER TO BECOME A VOLUNTEER ENVIRONMENTAL

1 ADVOCATE. MY SON IS NOT EMPLOYED.

2 AND MY FAVORITE HOBBY IS HIKING WITH MY FRIENDS.

3 THE COURT: THANK YOU, MA'AM.

4 JUROR NUMBER 25, GO AHEAD, SIR.

5 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS  
6 JOSE GONZALEZ AND I'M JUROR NUMBER 25. I WAS BORN IN MEXICO  
7 AND NOW I LIVE IN SALINAS FOR THE LAST 25 YEARS.

8 AND I LIVE WITH MY WIFE. WE GOT TWO KIDS. ONE IS 12 AND  
9 THE OTHER ONE IS THREE.

10 NO EDUCATIONAL BACKGROUND.

11 I WORK FOR A COMPANY AS A SERVICE TECHNICIAN.

12 NO SPECIAL SKILLS.

13 MY WIFE, SHE WORKS FOR DOMINICAN HOSPITAL SANTA CRUZ.  
14 SHE'S A CASHIER.

15 AND I'VE GOT TWO KIDS WHO ARE TOO YOUNG.

16 AND MY FAVORITE HOBBY --

17 THE COURT: A BOY AND A GIRL? ONE OF EACH, SIR?  
18 TELL ME ABOUT YOUR CHILDREN, A BOY AND A GIRL?

19 PROSPECTIVE JUROR: TWO BOYS.

20 THE COURT: TWO BOYS, GO AHEAD.

21 PROSPECTIVE JUROR: AND MY FAVORITE HOBBY IS COACHING  
22 SOCCER.

23 THE COURT: ALL RIGHT. THANK YOU, SIR.

24 JUROR NUMBER 26, YOU'RE NEXT. GO AHEAD, SIR.

25 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS

1 SINGUR SALEM, JUROR NUMBER 26. I WAS BORN IN INDIA AND NOW  
2 I'VE LIVED IN SAN JOSE FOR ABOUT 17 YEARS.

3 I LIVE WITH MY WIFE AND I HAVE AN EIGHT YEAR OLD BOY.

4 MY EDUCATIONAL BACKGROUND IS I HAVE A MASTER'S DEGREE IN  
5 ELECTRONICS ENGINEERING AND I'M EMPLOYED, SELF-EMPLOYED  
6 ENTREPRENEUR, AND SPECIAL SOFTWARE DEVELOPMENT.

7 AND MY WIFE WORKS. SHE'S AN ENGINEER. SHE WORKS IN  
8 CISCO SYSTEMS.

9 AND MY SON IS EIGHT YEARS OLD, HE'S NOT EMPLOYED.

10 AND MY HOBBIES IS READING BOOKS AND WATCHING TV.

11 THE COURT: THANK YOU, SIR. IF YOU COULD JUST PASS  
12 THE MICROPHONE OVER.

13 JUROR NUMBER 27, AS SOON AS YOU RECEIVE IT, YOU'RE UP  
14 NEXT. THANK YOU. GO AHEAD, JUROR NUMBER 27.

15 PROSPECTIVE JUROR: HI. MY NAME IS MAHESH  
16 RAMACHANDRAN. MY NUMBER IS 27. I WAS BORN IN INDIA. I LIVE  
17 IN SAN JOSE CURRENTLY. I'VE LIVED IN NORTHERN CALIFORNIA FOR  
18 23 YEARS.

19 I LIVE WITH MY WIFE AND MY TWO CHILDREN. MY SON IS 12  
20 AND MY DAUGHTER IS SEVEN.

21 THE COURT: I BET HE BETTER NOT COME HOME WITH A B  
22 PLUS, RIGHT?

23 (LAUGHTER.)

24 THE COURT: GO AHEAD, SIR. I DIGRESS.

25 PROSPECTIVE JUROR: I HAVE A BACHELOR'S AND MASTER'S



1 DEGREES IN ELECTRICAL AND COMPUTER ENGINEERING FROM U.C. DAVIS  
2 AND AN M.B.A. FROM SAN JOSE STATE.

3 I CURRENTLY WORK FOR A HIGH TECH START-UP HERE IN  
4 SAN JOSE.

5 THE COURT: WHAT'S THE NAME OF YOUR START-UP, SIR?

6 PROSPECTIVE JUROR: IT'S CALLED NET ENDRIDGE. IT'S  
7 LOCATED BY THE SAN JOSE AIRPORT.

8 AND I DO NOT HAVE ANY SPECIAL SKILLS BEYOND MY ACADEMIC  
9 BACKGROUND.

10 MY WIFE IS A HOME MAKER. AND MY CHILDREN ARE GOING TO  
11 SCHOOL AT THIS POINT.

12 AND MY HOBBIES ARE RUNNING.

13 THE COURT: THANK YOU, SIR.

14 JUROR NUMBER 28, GO AHEAD, MA'AM.

15 PROSPECTIVE JUROR: HI. MY NAME IS LEENA JOSHI,  
16 JUROR NUMBER 28. I WAS BORN IN MUMBAI, INDIA. I LIVE RIGHT  
17 NOW IN PALO ALTO AND I'VE LIVED IN NORTHERN CALIFORNIA FOR THE  
18 LAST 15 OR SO YEARS.

19 I LIVE WITH MY HUSBAND AND YOUNG SON. HE'S TEN YEARS OLD.

20 MY EDUCATIONAL BACKGROUND, I HAVE AN UNDERGRADUATE DEGREE  
21 IN COMPUTER SCIENCE FROM BOMBAY AND A POST-GRADUATE DEGREE IN  
22 MANAGEMENT FROM THE INDIAN INSTITUTE OF MANAGEMENT OF IN  
23 CALCUTTA.

24 I WORK FOR SPLUNK AND I RUN SOLUTIONS MARKETING FOR THEM.

25 NO SPECIAL SKILLS BEYOND MY EDUCATION.

1 MY HUSBAND ALSO RUNS HIS OWN TECHNOLOGY START-UP IN TRAVEL  
2 TECHNOLOGY.

3 AND MY SON IS IN SCHOOL. HOPEFULLY, YOU KNOW, HE'LL BE A  
4 DOCTOR BECAUSE WE'RE INDIAN.

5 (LAUGHTER.)

6 PROSPECTIVE JUROR: AND MY HOBBY IS READING AND  
7 HIKING.

8 THE COURT: THANK YOU, JUROR NUMBER 28.

9 JUROR NUMBER 29, GOOD MORNING, SIR.

10 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS  
11 ARMANDO HUERTA. I'M JUROR NUMBER 29. I WAS BORN IN  
12 LOS ANGELES. I LIVE IN GILROY. I HAVE LIVED IN NORTHERN  
13 CALIFORNIA FOR ABOUT 16 YEARS.

14 I LIVE WITH MY WIFE, MY FOUR CHILDREN, AND MY MOM DECIDED  
15 ITS PAYBACK TIME. MY OLDEST DAUGHTER IS 17; MY SECOND OLDEST  
16 DAUGHTER IS 14; AND MY YOUNGEST DAUGHTER IS 12; MY SON IS 11.

17 I HAVE A HIGH SCHOOL EDUCATION.

18 I'M A SECURITY TECHNICIAN AT THE UNIVERSITY OF CALIFORNIA  
19 SAN FRANCISCO.

20 I DON'T HAVE ANY SPECIAL SKILLS OR TRAINING.

21 MY WIFE WORKS AS AN OFFICE COORDINATOR IN SOUTH VALLEY  
22 MIDDLE SCHOOL IN GILROY.

23 AND MY DAUGHTER IS A WAITRESS AT A SUSHI PLACE IN GILROY.

24 AND I LIKE SPENDING TIME WITH MY KIDS.

25 THE COURT: THANK YOU, JUROR NUMBER 29.

1 JUROR NUMBER 30, GO AHEAD, SIR.

2 PROSPECTIVE JUROR: HI. MY NAME IS WEI JIE CHENG AND  
3 I'M NUMBER 30. I WAS BORN IN SHANGHAI, CHINA AND NOW I LIVE IN  
4 SAN JOSE. I'VE BEEN LIVING HERE FOR 22 YEARS.

5 I LIVE WITH MY WIFE. WE CURRENTLY HAVE NO KIDS.

6 I HAVE A BACHELOR OF SCIENCE DEGREE FROM U.C. DAVIS.

7 RIGHT NOW I'M A SOFTWARE QA AT A TECH COMPANY CALLED  
8 COUPONS.COM.

9 NO SPECIAL SKILLS, JUST ENOUGH FOR MY JOB.

10 MY WIFE IS A RESEARCH SCIENTIST AT A MEDICAL DEVICES  
11 COMPANY CALLED BECKTON DICKINSON.

12 MY FAVORITE HOBBIES ARE SOCCER, TRAVELLING, FOOTBALL.

13 THE COURT: THANK YOU, SIR.

14 JUROR NUMBER 31, GO AHEAD SIR. GOOD MORNING.

15 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS

16 DAVID BRIGHAM AND I'M JUROR NUMBER 31. I WAS BORN IN  
17 PONCA CITY, OKLAHOMA. I CURRENTLY LIVE IN PALO ALTO,  
18 CALIFORNIA, AND I'VE LIVED THERE FOR 41 YEARS.

19 I LIVE WITH MY WIFE AND TWO CHILDREN. MY SON IS 18, MY  
20 DAUGHTER IS 16.

21 I HAVE A BACHELOR'S OF MUSIC FROM SAN JOSE STATE AND A  
22 CALIFORNIA TEACHING CREDENTIAL FROM SAN JOSE STATE. I TEACH  
23 MIDDLE SCHOOL AND HIGH SCHOOL BAND FOR THE PALO ALTO UNIFIED  
24 SCHOOL DISTRICT.

25 SPECIAL SKILLS IS I PLAY SOME PRETTY GOOD JAZZ TRUMPET.

1 MY WIFE IS A RESEARCH CELL BIOLOGIST. SHE WORKS FOR  
2 ADONIS PHARMACEUTICALS DOING RESEARCH IN NEUROLOGICAL DISORDERS  
3 FOR THE MOST PART.

4 NEITHER OF MY CHILDREN ARE EMPLOYED. THEY'RE BOTH  
5 STUDENTS.

6 AND MY FAVORITE HOBBY IS WATCHING, DEPENDING ON THE TIME  
7 OF YEAR, THE 49ERS, THE GIANTS, OR THE WARRIORS.

8 THE COURT: THANK YOU, SIR.

9 JUROR NUMBER 32, GO AHEAD, MA'AM.

10 PROSPECTIVE JUROR: HI. MY NAME IS KERRY BENOIT.  
11 NUMBER 32. I WAS BORN IN SAN JOSE. AND I NOW LIVE IN  
12 SANTA CRUZ. I'VE LIVED IN NORTHERN CALIFORNIA ABOUT 13 YEARS,  
13 MINUS COLLEGE.

14 MY HUSBAND LIVES WITH ME, AS WELL AS MY TWO CHILDREN.  
15 MY -- I HAVE TWO GIRLS, A SEVEN YEAR OLD AND, TODAY, A TEN YEAR  
16 OLD. IT'S HER BIRTHDAY TODAY.

17 I HAVE A B.A. IN SOCIOLOGY FROM U.C. SANTA BARBARA.

18 AND RIGHT NOW I WORK IN CHANNEL MARKETING AT VMWARE IN  
19 PALO ALTO.

20 I HAVE NO SPECIAL SKILLS. KIDS WOULD PROBABLY SAY  
21 DIFFERENT.

22 BUT -- MY HUSBAND IS CARTOGRAPHER FOR THE CALIFORNIA  
23 COASTAL COMMISSION.

24 AND MY KIDS DON'T WORK YET.

25 AND FAVORITE HOBBY, I LIKE TO RUN AND COOK.

1 THE COURT: THANK YOU, JUROR NUMBER 32.

2 JUROR NUMBER 33, GO AHEAD, SIR.

3 PROSPECTIVE JUROR: GOOD MORNING. MY NAME IS  
4 MIKE LEE. I'M JUROR NUMBER 33. I WAS BORN IN TAIPEI, TAIWAN.  
5 I LIVE IN PALO ALTO. I'VE LIVED IN NORTHERN CALIFORNIA FOR 30  
6 YEARS.

7 I LIVE THERE WITH MY WIFE AND MY DAUGHTER. MY DAUGHTER  
8 IS 20 MONTHS.

9 MY EDUCATIONAL BACKGROUND IS I HAVE A BACHELOR'S DEGREE  
10 IN COMPUTER SCIENCE AT U.C. IRVINE, MASTER'S DEGREE IN  
11 ENGINEERING MANAGEMENT FROM SANTA CLARA UNIVERSITY, AND A J.D.  
12 FROM SANTA CLARA UNIVERSITY.

13 I'M A PATENT LITIGATION ATTORNEY AT KRAMER, LEVIN.

14 SPECIAL SKILLS, I USED TO BE A SOFTWARE ENGINEER FOR TEN  
15 YEARS BEFORE I WAS AN ATTORNEY.

16 MY SPOUSE -- MY WIFE IS ALSO AN ATTORNEY FOR  
17 O'MELVENY & MYERS.

18 MY FAVORITE RECREATIONAL ACTIVITY IS TAKING MY DAUGHTER TO  
19 THE PARK.

20 THE COURT: THANK YOU, SIR.

21 JUROR NUMBER 34, YOU'RE NEXT. GO AHEAD, MA'AM.

22 PROSPECTIVE JUROR: HI. MY NAME IS SANDY HO AND I'M  
23 JUROR NUMBER 34. I WAS BORN IN TAIWAN. I LIVE IN  
24 MOUNTAIN VIEW. AND MY -- I LIVE IN NORTHERN CALIFORNIA FOR THE  
25 LAST 22 YEARS, AND MY MOM LIVES WITH ME.

1 THE COURT: WE'RE HAVING SOME A.V. ISSUES, SO IF EACH  
2 OF YOU COULD DO YOUR BEST TO BELT IT OUT, IT WOULD HELP US ALL  
3 TREMENDOUSLY.

4 PROSPECTIVE JUROR: I DON'T HAVE ANY KIDS. NOT  
5 MARRIED.

6 EDUCATIONAL BACKGROUND, I HAVE A B.S. IN BUSINESS FROM  
7 SAN JOSE STATE. RIGHT NOW I WORK FOR COMPANY, TRA  
8 ENVIRONMENTAL SCIENCES. I PROVIDE I.T. AND OFFICE AND BUILDING  
9 SUPPORT.

10 SPECIAL SKILL, I'M BILINGUAL.

11 AND I'M NOT MARRIED, SO NO CHILD. NO KIDS.

12 MY FAVORITE HOBBY IS TO COOK.

13 THE COURT: THANK YOU, JUROR NUMBER 34.

14 JUROR NUMBER 35, YOU'RE NEXT, MA'AM. GOOD MORNING.

15 PROSPECTIVE JUROR: MY NAME IS FE LOURDES BERCASIO,  
16 AND I WAS BORN IN THE PHILIPPINES. I LIVE IN SAN JOSE. AND  
17 I'VE BEEN HERE IN NORTHERN CALIFORNIA FOR THE PAST 34 YEARS.

18 I RESIDE WITH MY HUSBAND AND TWO CHILDREN, TWO SONS.  
19 THEY CAME BACK TO THE NEST TO SAVE. I HAVE THREE BOYS, AGES  
20 33, 32, AND 30.

21 I HAD MY BACHELOR OF SCIENCE IN NURSING. I'M A RETIRED  
22 NURSE FOR KAISER SAN JOSE.

23 SPECIAL SKILLS, I USED TO BE AN ONCOLOGY CANCER NURSE AND  
24 HAD MY SPECIAL TRAINING FOR MANAGER OF SKILLS, SO I GRADUATED  
25 AS A NURSE MANAGER.

1           AND MY HUSBAND IS A RETIRED ELECTRICIAN FOR THE DISSOLVED  
2           NEW UNITED MOTORS, NUMI.

3           MY SONS, MY ELDEST SON IS AN OWNER OF MIGHTY THREDZ, WHICH  
4           IS A SILK SCREENING LOGO DESIGN, WEB DESIGN COMPANY; MY SECOND  
5           SON IS A CINEMATOGRAPHER, HE USED TO BE WITH WARNER BROTHERS;  
6           AND MY THIRD SON IS A FINANCIAL SUPPORT ANALYST OF A COMPANY,  
7           AND I DON'T REMEMBER THE NAME.

8           I LOVE COOKING, I LOVE DANCING, AND I LOVE HIKING.

9           THE COURT:   THANK YOU VERY MUCH, MA'AM.   JUROR NUMBER  
10          36, GO AHEAD, SIR.

11          PROSPECTIVE JUROR:   MY NAME IS TODD MCMASTERS, JUROR  
12          NUMBER 36.   I WAS BORN IN MONTEREY, CALIFORNIA.   I NOW LIVE IN  
13          BOULDER CREEK, CALIFORNIA AND I'VE BEEN HERE MY WHOLE LIFE, 47  
14          YEARS.

15          I RESIDE WITH MY WIFE AND OUR TWO DOGS AND OUR CAT.   NO  
16          CHILDREN.

17          I GOT MY ASSOCIATE OF ARTS DEGREE FROM MONTEREY PENINSULA  
18          COLLEGE IN MUSIC.   I ATTENDED FURTHER COLLEGE, BUT DIDN'T GET A  
19          DEGREE.

20          MY OCCUPATION IS AN AUDIO ENGINEER AND I WORK FOR AV  
21          TECHNICA IN SUNNYVALE, AND THE JOB DUTIES ARE WE STAGE  
22          CORPORATE EVENTS, BRING IN SYSTEMS, PROJECTORS AND ALL THE LIKE  
23          SO THAT COMPANIES CAN HAVE ESSENTIALLY A SYSTEM IN THEIR  
24          COMMUNICATIONS.

25          THE COURT:   CAN YOU FIX MY MIKE, SIR?

1 PROSPECTIVE JUROR: YOUR BATTERY IS OUT.

2 (LAUGHTER.)

3 THE COURT: I APPRECIATE THE INSIGHT, SIR. GO AHEAD.

4 (LAUGHTER.)

5 PROSPECTIVE JUROR: SPECIAL SKILLS, UNITED STATES  
6 ARMY RESERVE MEDICAL CORPS TRAINED AS A MEDIC. I WORKED IN A  
7 HOSPITAL AS PART OF MY DUTIES.

8 MY WIFE IS UNEMPLOYED RIGHT NOW. NO CHILDREN.

9 AND FAVORITE HOBBY IS PLAYING MUSIC AND TOURING TO PLAY  
10 MUSIC.

11 THE COURT: THANK YOU, SIR.

12 JUROR NUMBER 37, GO AHEAD, MA'AM.

13 PROSPECTIVE JUROR: I'M MAUREEN BIGGAR. I'M JUROR  
14 NUMBER 37. I WAS BORN IN PORTLAND, OREGON. AND I'VE LIVED IN  
15 NORTHERN CALIFORNIA ALL OF MY LIFE.

16 I LIVE WITH MY HUSBAND AND MY TWO CHILDREN, AGES 16 AND  
17 17. THEY ATTEND HOMESTEAD HIGH SCHOOL IN SUNNYVALE.

18 I'M A RESPIRATORY THERAPIST. I WORK AT O'CONNOR HOSPITAL,  
19 AND MY DUTIES ARE AIRWAY MANAGEMENT, TAKING CARE OF PEOPLE ON  
20 LIFE SUPPORT, VENTILATORS, RESUSCITATION OF NEWBORNS AND  
21 ADULTS. THOSE ARE MY SPECIAL SKILLS.

22 I HAVE AN A.A. IN ADMINISTRATION OF JUSTICE AND MY SCHOOL  
23 FOR RESPIRATORY CARE PRACTITIONER.

24 MY HUSBAND IS A DESIGNER. HE WORKS FOR WORKSAFE TECH IN  
25 LOS GATOS.



1 MY CHILDREN ARE UNEMPLOYED AT THIS TIME, SADLY.

2 AND MY FAVORITE HOBBY IS RUNNING THEM WHEREVER THEY NEED  
3 TO GO. THEY PLAY IN A BAGPIPE BAND AND PLAY SOCCER. SO --

4 THE COURT: THANK YOU VERY MUCH, JUROR NUMBER 38.

5 JUROR NUMBER 39, GO AHEAD.

6 PROSPECTIVE JUROR: 38.

7 THE COURT: I'M SORRY, JUROR NUMBER 38. GO AHEAD.

8 PROSPECTIVE JUROR: I'M NANCY ROQUERO. I'M NUMBER  
9 38. I WAS BORN IN PALO ALTO, CALIFORNIA. I LIVE IN SUNNYVALE  
10 NOW. I WAS IN SOUTHERN CALIFORNIA FOR ABOUT 16 YEARS AND MOVED  
11 BACK HERE IN ABOUT 2012.

12 I LIVE WITH MY HUSBAND AND MY SON WHO'S 23.

13 GRADUATED FROM HIGH SCHOOL, HAD SOME COLLEGE.

14 I WORK FOR A SMALL MEDICAL DEVICE COMPANY, PIVOT MEDICAL  
15 IN SUNNYVALE, CUSTOMER SERVICE AND ORDER PROCESSING.

16 NO SPECIAL SKILLS.

17 MY HUSBAND WORKS FOR VARIAN MEDICAL IN PALO ALTO AS A  
18 PURCHASING EXPEDITER.

19 MY SON IS, AGAIN, 23 AND HE JUST CHANGED JOBS FROM PF  
20 CHANG'S TO THE BEER GARDEN IN SUNNYVALE. HE DOES WAITING AND  
21 ORDERING AND SO FORTH.

22 AND FAVORITE HOBBY IS PET SITTING AND LANDSCAPING.

23 THE COURT: THANK YOU, MA'AM.

24 ALL RIGHT. I BELIEVE WE'RE NOW UP TO JUROR NUMBER 39. IF  
25 YOU COULD JUST PASS THAT MICROPHONE, MR. RIVERA WILL GET IT TO

1 WHERE IT NEEDS TO GO.

2 THANK YOU, SIR.

3 YOU KNOW WHAT? LET'S JUST KEEP GOING BECAUSE IT APPEARS  
4 THAT THE BATTERIES ARE OUT.

5 SO JUROR NUMBER 39, YES, SIR, HERE'S YOUR CHANCE TO  
6 PROJECT, SIR. GO AHEAD.

7 PROSPECTIVE JUROR: ALL RIGHT. MY NAME IS  
8 DAVE JENSEN. I'M JUROR NUMBER 39. I WAS BORN IN INGELWOOD,  
9 CALIFORNIA. I LIVE NOW IN SAN JOSE AND I'VE LIVED IN NORTHERN  
10 CALIFORNIA FOR 24 YEARS.

11 MY WIFE AND SIX YEAR OLD DAUGHTER LIVES WITH ME.

12 I HAVE A BACHELOR'S IN ELECTRICAL ENGINEERING AND A  
13 MASTER'S IN COMPUTER ENGINEERING. MY OCCUPATION, I WORK FOR  
14 B.A. SYSTEMS WHERE I WORK ON VEHICLE SYSTEMS, SOFTWARE EMBEDDED  
15 IN THE VEHICLE. WE BUILD FOR THE DEPARTMENT OF DEFENSE. I  
16 WORK ON THE SOFTWARE THAT'S PART OF THE VEHICLE THAT WE DELIVER  
17 TO DEPARTMENT OF DEFENSE.

18 SPECIAL SKILLS, SEMI PRO PHOTOGRAPHER, AND I CAN FIX ABOUT  
19 ANYTHING ELECTRONIC.

20 THE COURT: OTHER THAN A MICROPHONE?

21 PROSPECTIVE JUROR: OH, I NOTICED THE BATTERY WAS  
22 DEAD LONG AGO. I CONCUR WITH HIS ASSESSMENT.

23 (LAUGHTER.)

24 PROSPECTIVE JUROR: MY WIFE WORKS AT CISCO SYSTEMS AS  
25 A PROJECT MANAGER, AND MY DAUGHTER OBVIOUSLY IS IN SCHOOL.

1           HOBBIES, I'M ACTIVE IN THE MAKER MOVEMENT AND I WORK ON  
2       EMBEDDED SYSTEMS.

3           THE COURT:   THANK YOU, SIR.

4           JUROR NUMBER 40, YOU'RE NEXT.   THERE YOU ARE, SIR.   GO  
5       AHEAD.

6           PROSPECTIVE JUROR:   I'M AUSTIN LEE, JUROR NUMBER 40.  
7       I WAS BORN IN SAN JOSE, STILL LIVE IN SAN JOSE.   I'VE LIVED  
8       HERE ALL MY LIFE.

9           I LIVE WITH MY WIFE AND TWO FOSTER CHILDREN.   WE HAVE A  
10      TWO YEAR OLD BOY AND A ONE YEAR OLD BOY.

11          MY EDUCATIONAL BACKGROUND IS MY -- I HAVE UNION  
12      APPRENTICESHIP PROGRAM.   I'M AN UNEMPLOYED UNION ELECTRICIAN.  
13      WE INSTALL ELECTRICAL SYSTEMS IN COMMERCIAL INDUSTRIAL  
14      BUILDINGS.

15          SPECIAL SKILLS, I'M GOOD WITH MY HANDS.

16          MY WIFE IS A MIDDLE SCHOOL MATH TEACHER.   KIDS ARE TOO  
17      YOUNG.

18          AND I AM ALSO A PROFESSIONAL BMX'ER AND R.C. CAR RACER.

19          THE COURT:   THANK YOU, SIR.

20          JUROR NUMBER 41, YOU'RE NEXT.   GO AHEAD, SIR.

21          PROSPECTIVE JUROR:   I'M SERGIO ALEJANDRO, JUROR  
22      NUMBER 41.   I WAS BORN HERE IN CALIFORNIA.   I LIVE IN SUNNYVALE  
23      RIGHT NOW.   I'VE LIVED IN CALIFORNIA ALL MY LIFE, 23 YEARS.

24          I LIVE WITH MY PARENTS.   I HAVE NO KIDS.

25          I HAVE A HIGH SCHOOL DIPLOMA.

1 I WORK AT A GARBAGE COMPANY CALLED METROLOGY. I WATCH  
2 THEIR GARBAGE CANS.

3 NO SPECIAL SKILLS. I'M NOT MARRIED. NO KIDS.  
4 AND I LIKE RIDING MOTORCYCLES.

5 THE COURT: THANK YOU, SIR.

6 JUROR NUMBER 42. THANK YOU, MA'AM.

7 PROSPECTIVE JUROR: I'M MARY ANN WEBB, JUROR NUMBER  
8 42. I WAS BORN IN NEW YORK STATE. I LIVE IN PALO ALTO NOW.  
9 I'VE LIVED IN THE SAME HOUSE FOR 45 YEARS IN PALO ALTO.

10 I LIVE ALONE NOW. I HAVE THREE CHILDREN, AGES 50, 54, AND  
11 56.

12 I HAVE A CALIFORNIA TEACHING CREDENTIAL FOR ELEMENTARY  
13 SCHOOL. MY CURRENT OCCUPATION IS AS A COMMUNITY VOLUNTEER. I  
14 DO VOLUNTEER WORK IN VARIOUS SOCIAL SERVICE AGENCIES, MOSTLY  
15 HAVING TO DO WITH THE COUNTY.

16 I DON'T HAVE ANY SPECIAL SKILLS OR SPECIAL TRAINING.

17 MY HUSBAND WAS ON THE -- HE WAS A PROFESSOR AT STANFORD  
18 UNIVERSITY.

19 MY CHILDREN, THE ONE WHO'S 50 IS A PRESS OFFICER FOR THE  
20 IAEA; MY 54 YEAR OLD IS A DAUGHTER WHO IS A GLASS ARTIST AND A  
21 GOLDEN RETRIEVER BREEDER; MY OLDEST CHILD, 56, IS UNEMPLOYED  
22 RIGHT NOW, BUT HE HAS DONE WORK, GOVERNMENTAL KINDS OF WORK IN  
23 THE ENVIRONMENTAL, ON ENVIRONMENTAL ISSUES.

24 MY FAVORITE HOBBY IS READING AND SPENDING TIME WITH  
25 FRIENDS.

1 THE COURT: THANK YOU, MA'AM.

2 JUROR NUMBER 43, I BELIEVE YOU'RE NEXT, SIR. GO AHEAD.

3 PROSPECTIVE JUROR: JOHN DORSEY, JUROR NUMBER 43.

4 BORN IN TRONA, CALIFORNIA. I LIVE IN SAN JOSE, AND 24 YEARS IN  
5 NORTHERN CALIFORNIA.

6 I LIVE WITH MY WIFE, TWO KIDS, BOTH BOYS, 25 AND 24.

7 BACHELOR'S DEGREE IN ENGINEERING, TECHNOLOGY ELECTRONICS.

8 OCCUPATION, COMPLIANCE ENGINEER AT OCZ TECHNOLOGIES.

9 NO SPECIAL SKILLS.

10 MY WIFE IS A SENIOR DIRECTOR OF TECH SUPPORT AT ORACLE.

11 MY YOUNGEST CHILD WORKS AT ORACLE AS WELL, SOFTWARE  
12 DEVELOPER. OLDEST IS A CPA AT DELOITTE IN SAN FRANCISCO.

13 FAVORITE HOBBIES ARE SHOOTING AND SCUBA DIVING.

14 THE COURT: THANK YOU, SIR.

15 JUROR NUMBER 44, GO AHEAD, MA'AM.

16 PROSPECTIVE JUROR: HI, I'M ANNETTE STEWART, NUMBER  
17 44. I WAS BORN IN HARBOR CITY, CALIFORNIA. I LIVE IN  
18 SUNNYVALE. I'VE LIVED IN NORTHERN CALIFORNIA FOR ABOUT 21  
19 YEARS.

20 I HAVE A SON SOON TO BE 30 AND A STEP-SON WHO JUST TURNED  
21 29.

22 MY EDUCATIONAL BACKGROUND IS ANIMAL HUSBANDRY AND SOME  
23 LEGAL AND MASSAGE PROFESSIONAL.

24 I AM A MASSAGE PRACTITIONER RIGHT NOW. I HELP PEOPLE HEAL  
25 THEMSELVES.

1 MY HUSBAND JUST GOT A JOB WORKING FOR FUSION I/O. HE'S A  
2 SENIOR SOFTWARE ENGINEER.

3 AND MY SON WORKS FOR LUMO, FUSION -- EXCUSE ME. FULHAM,  
4 WE JUST PURCHASED ANOTHER ONE. IT'S A LIGHTING INDUSTRY, TEST  
5 ENGINEER. AND HE ALSO WORKS AS A PROPERTY MANAGER IN  
6 SANTA BARBARA. AND MY STEP-SON IS A MASSAGE THERAPIST AND  
7 WORKS FOR MASSAGE ENVY.

8 I LIKE TO READ, I LIKE TO GARDEN, AND I WORK WITH ANIMALS.

9 THE COURT: THANK YOU, MA'AM.

10 JUROR NUMBER 45, GO AHEAD, SIR.

11 PROSPECTIVE JUROR: ALLEN LOCKETT, NUMBER 45. I WAS  
12 BORN IN TEMPE, ARIZONA AND I LIVE IN LOS GATOS, CALIFORNIA.  
13 I'VE LIVED IN NORTHERN CALIFORNIA MY WHOLE LIFE, ABOUT 19  
14 YEARS.

15 I LIVE WITH MY PARENTS AND MY LITTLE BROTHER. I HAVE NO  
16 KIDS.

17 I HAVE A HIGH SCHOOL DEGREE AND -- HIGH SCHOOL EDUCATION  
18 AND I'M CURRENTLY IN COLLEGE.

19 I'M EMPLOYED AT THE YMCA CAMP CAMPBELL IN BOULDER CREEK  
20 WHERE I'M A GROUP PROGRAM SPECIALIST, SO SETTING UP ACTIVITIES  
21 FOR FAMILY CAMPS AND CORPORATE RETREATS AND EVERYTHING. I'M  
22 CPR AND FIRST AID TRAINED.

23 DON'T HAVE A SPOUSE. NO KIDS.

24 AND MY FAVORITE HOBBY IS PLAYING MUSIC.

25 THE COURT: ALL RIGHT. THANK YOU VERY MUCH, JUROR

1 NUMBER 45.

2 LADIES AND GENTLEMEN, WITH THAT TASK COMPLETED, IT'S NOW  
3 TIME TO GIVE THE ATTORNEYS AN OPPORTUNITY TO ASK CERTAIN  
4 QUESTIONS OF YOU. SOME OF THESE MAY BE ORIGINAL QUESTIONS,  
5 OTHERS MAY BE FOLLOW-UP.

6 AGAIN, JUST AS WITH ME, I APPRECIATE YOUR WILLINGNESS TO  
7 SHARE THESE DETAILS OF YOUR LIVES. WE'LL GET THROUGH THIS AS  
8 QUICKLY AS WE CAN, BUT THIS IS A VERY IMPORTANT PART OF THE  
9 PROCESS IN THIS COURT, SO I HOPE YOU'LL PAY AS MUCH AND AS  
10 CAREFUL ATTENTION TO THEM AS YOU HAVE TO ME, HOPEFULLY EVEN  
11 MORE.

12 MR. OTTESON, YOU MAY PROCEED.

13 MR. OTTESON: THANK YOU, YOUR HONOR.

14 JUROR NUMBER 2, CAN YOU TELL ME WHAT LANGUAGES YOU PROGRAM  
15 IN?

16 PROSPECTIVE JUROR: ORIGINALLY C, CURRENTLY JAVA.

17 MR. OTTESON: AND LET'S SEE. JUROR NUMBER 8, YOU  
18 SAID YOU ARE A CHIP DESIGNER AT BROADCOM?

19 PROSPECTIVE JUROR: YES.

20 MR. OTTESON: WHAT TOOLS DO YOU USE THERE TO DESIGN  
21 CHIPS?

22 PROSPECTIVE JUROR: I USUALLY I USE THE MENTOR  
23 GRAPHICS TOOL CALLED A TEXT COMPRESS.

24 MR. OTTESON: LET ME ASK, YOU KNOW, WE'LL DO KIND OF  
25 SOME GENERAL QUESTIONS, SO IF YOU COULD HOLD UP YOUR CARDS, I'D

1 APPRECIATE IT.

2 IS THERE ANYBODY OF YOU WHO DOES NOT OWN A SMARTPHONE?

3 OKAY. LET'S SEE. HOLD YOUR CARDS UP, PLEASE. THANK YOU.

4 LET ME ASK YOU THIS: FOR THOSE OF YOU WHO HELD UP YOUR  
5 CARDS, DO YOU -- ARE THERE ANY OF YOU WHO DON'T OWN ANY KIND OF  
6 A CELL PHONE AT ALL? OKAY.

7 LET ME ASK YOU THIS: FOR THOSE OF YOU WHO DO OWN CELL  
8 PHONES, DO ANY OF YOU OWN AN HTC PHONE?

9 OKAY. 20 AND 44. THANK YOU, AND 8, OKAY.

10 LET ME ASK YOU THIS: IF YOU COULD HOLD UP YOUR CARDS IF  
11 THIS APPLIES TO YOU, DO ANY OF YOU KNOW HOW TO PROGRAM A PHONE  
12 OR PROGRAM -- CREATE AN APP THAT WOULD GO ON A PHONE?

13 OKAY. 28, 39, AND 20. LET'S SEE. OKAY, AND 26.

14 JUROR NUMBER 26, HAVE YOU ACTUALLY CREATED AN APP FOR A  
15 SMARTPHONE?

16 PROSPECTIVE JUROR: YES.

17 MR. OTTESON: WHAT WAS IT?

18 PROSPECTIVE JUROR: IT WAS FOR THE PREVIOUS VERSION,  
19 FOR JAPANESE PHONES, NOT AMERICAN ONES.

20 MR. OTTESON: OKAY. WHAT WAS THE NATURE OF WHAT THE  
21 APP DID?

22 PROSPECTIVE JUROR: IT WAS FOR DEVELOPING DRIVERS FOR  
23 THE PHONES, SO FOR PRODUCT APPLICATIONS.

24 MR. OTTESON: OKAY. THANK YOU.

25 FOR THOSE OF YOU WHO DO HAVE SMARTPHONES, HOW MANY OF YOU



1 USE YOUR SMARTPHONES EVERY DAY? KIND OF A SILLY QUESTION I  
2 GUESS.

3 LET ME ASK YOU GUYS THIS: IF YOU WOULDN'T MIND HOLDING  
4 UP YOUR CARD IF THIS IS APPLICABLE TO YOU, HAVE ANY OF YOU EVER  
5 BEEN SUED BEFORE IN A LAWSUIT?

6 JUROR NUMBER 12, COULD YOU TELL ME WHAT THE NATURE OF THE  
7 LAWSUIT WAS, PLEASE?

8 PROSPECTIVE JUROR: PARTNERSHIP.

9 MR. OTTESON: SO IT WAS A BUSINESS --

10 PROSPECTIVE JUROR: 50-50 PARTNERSHIP THAT DISSOLVED  
11 AND HE DECIDED TO SUE.

12 MR. OTTESON: OKAY. THAT'S FINE. THANK YOU VERY  
13 MUCH.

14 JUROR NUMBER 8?

15 PROSPECTIVE JUROR: YES, EVICTION OF TENANT.

16 MR. OTTESON: WAS THIS WHERE YOU WERE THE LANDLORD?

17 PROSPECTIVE JUROR: YEAH, I'M LANDLORD.

18 MR. OTTESON: OKAY. OKAY. LET'S SEE. JUROR NUMBER  
19 16?

20 PROSPECTIVE JUROR: IT WAS A BUSINESS PARTNERSHIP  
21 WITH FIVE PARTNERS THAT TURNED VERY UGLY AND NASTY AND HOSTILE.

22 MR. OTTESON: OKAY. THANK YOU.

23 JUROR NUMBER 20, WHAT WAS THE NATURE OF YOUR LAWSUIT?

24 PROSPECTIVE JUROR: THE PRODUCT I MADE AT CISCO  
25 SYSTEMS WAS SUED FOR PATENT INFRINGEMENT.

1 MR. OTTESON: OKAY. WHAT -- SO WHAT WAS THE PRODUCT  
2 THAT WAS BEING SUED FOR PATENT INFRINGEMENT?

3 PROSPECTIVE JUROR: AT THAT TIME THE PRODUCT IS  
4 CALLED -- IT'S AN ATA DEVICE, ANALOG TELEPHONE ADAPTER, AND  
5 PBX. THE COMPANY WHO SUED US CLAIMED THAT THEY OWNED THE  
6 PATENT, SO YOU CANNOT HAVE A PBX FUNCTION WITHIN A ATA PHONE.

7 MR. OTTESON: OKAY. WHAT WAS THE NAME OF THE COMPANY  
8 THAT SUED CISCO?

9 PROSPECTIVE JUROR: I CAN'T REMEMBER UNFORTUNATELY.  
10 I DON'T REMEMBER THE COMPANY WHO SUED US. IT'S A TECHNOLOGY  
11 COMPANY. IT'S AN I.P. COMPANY.

12 MR. OTTESON: IT WAS AN I.P. COMPANY?

13 PROSPECTIVE JUROR: AN I.P. COMPANY. THAT'S THE TERM  
14 THEY USED.

15 MR. OTTESON: OKAY.

16 PROSPECTIVE JUROR: SO I'LL USE THAT TERM.

17 MR. OTTESON: SURE, THAT'S FINE. THAT'S TOTALLY  
18 FINE. ABOUT HOW LONG AGO WAS THAT?

19 PROSPECTIVE JUROR: THAT WAS AT LEAST, I WOULD SAY,  
20 FOUR TO FIVE YEARS AGO.

21 MR. OTTESON: OKAY. WHERE WAS THAT LAWSUIT? WAS  
22 THAT HERE IN NORTHERN CALIFORNIA?

23 PROSPECTIVE JUROR: YEAH. I WAS WORKING AT CISCO  
24 SYSTEMS.

25 MR. OTTESON: OKAY. DID YOU HAVE YOUR DEPOSITION

1 TAKEN OR ANYTHING LIKE THAT?

2 PROSPECTIVE JUROR: ACTUALLY, THE MARKETING GUY WENT  
3 TO THE COURT. I DIDN'T GO. I JUST HELP PREPARE THE UNDERLYING  
4 STUFF.

5 MR. OTTESON: OKAY. VERY GOOD.

6 LET'S SEE. YES, MA'AM, JUROR 21?

7 PROSPECTIVE JUROR: I WAS SUED FOR MALPRACTICE.

8 MR. OTTESON: OKAY. HOW LONG AGO WAS THAT?

9 PROSPECTIVE JUROR: PROBABLY FIVE OR SIX YEARS AGO.

10 MR. OTTESON: OKAY. THANK YOU.

11 JUROR 24?

12 PROSPECTIVE JUROR: I WAS NAMED PERSONALLY IN A CASE  
13 FOR WRONGFUL TERMINATION, MYSELF AND ANOTHER MANAGER AND THE  
14 CORPORATION, AND THEY QUICKLY DROPPED THE CASE AGAINST MYSELF  
15 AND THE OTHER MANAGER AND JUST WENT FORWARD WITH THE CASE  
16 AGAINST THE CORPORATION.

17 MR. OTTESON: OKAY. THANK YOU VERY MUCH.

18 ANYBODY ELSE WHO HAS BEEN SUED IN A LAWSUIT? OKAY.

19 HAVE ANY OF YOU EVER BEEN INVOLVED IN A LAWSUIT AS A  
20 PLAINTIFF WHERE YOU WERE SUING SOMEBODY?

21 YES, WE'LL START WITH YOU, MA'AM, THANK YOU.

22 PROSPECTIVE JUROR: WE SUED OUR GENERAL CONSTRUCTOR  
23 IN THE CONSTRUCTION OF OUR HOME.

24 MR. OTTESON: IT WAS -- IT WAS A -- IT -INVOLVED THE  
25 CONSTRUCTION OF YOUR HOME?

1 PROSPECTIVE JUROR: YES.

2 MR. OTTESON: OKAY. HOW LONG AGO WAS THAT?

3 PROSPECTIVE JUROR: 17 YEARS AGO.

4 MR. OTTESON: OKAY. THANK YOU.

5 YES, SIR?

6 PROSPECTIVE JUROR: DURING THE COURSE OF THE LAWSUIT  
7 I MENTIONED EARLIER, WE SUED OUR ATTORNEY FOR MALPRACTICE.

8 MR. OTTESON: OKAY. THANK YOU.

9 (LAUGHTER.)

10 MR. OTTESON: YES, SIR, JUROR NUMBER 36?

11 PROSPECTIVE JUROR: SMALL CLAIMS COURT CASE ABOUT A  
12 VEHICLE ACCIDENT EIGHT YEARS AGO. WE ACTUALLY TOOK CARE OF IT  
13 WITHOUT INSURANCE AND THEN WE HAD TO TAKE HER TO COURT TO GET  
14 HER TO PAY US.

15 MR. OTTESON: OKAY. THANK YOU.

16 YES, MA'AM, JUROR NUMBER 42--

17 PROSPECTIVE JUROR: THERE WAS A PERSONAL INJURY SUIT  
18 WHEN WE LIVED IN CHICAGO. IT WAS ABOUT 50 YEARS AGO.

19 MR. OTTESON: YEAH. IT WAS IN CHICAGO, RIGHT,  
20 BECAUSE YOU'VE BEEN IN PALO ALTO FOR 45 YEARS?

21 PROSPECTIVE JUROR: YES.

22 MR. OTTESON: OKAY. THANK YOU.

23 LET'S SEE. BESIDES THE GENTLEMAN HERE ON THE FRONT ROW,  
24 HAVE ANY OF YOU EVER BEEN INVOLVED IN AN INTELLECTUAL PROPERTY  
25 OR PATENT LAWSUIT? BESIDES OUR PATENT LITIGATOR HERE I GUESS.

1 YES, SIR?

2 PROSPECTIVE JUROR: PERIPHERALLY. OUR START-UP WAS  
3 SUED BY A COMPETITOR FOR POSSIBLY USING INSIDE INFORMATION  
4 ABOUT THEIR PRODUCT.

5 MR. OTTESON: SO IT WAS LIKE A CONFIDENTIAL  
6 INFORMATION OR TRADE SECRET CASE, SOMETHING LIKE THAT?

7 PROSPECTIVE JUROR: YEAH. BASICALLY SOMEONE -- ONE  
8 OF OUR ENGINEERS GOT AHOLD OF THEIR PRODUCT AND WE INFERRED  
9 SOME THINGS ABOUT HOW IT WORKED JUST BY SIMPLY RUNNING IT.

10 MR. OTTESON: OKAY. HOW LONG AGO WAS THAT?

11 PROSPECTIVE JUROR: PROBABLY 15 YEARS AGO NOW.

12 MR. OTTESON: DO YOU RECALL WHO WAS ON THE OTHER SIDE  
13 OF THAT CASE, THE COMPETITOR?

14 PROSPECTIVE JUROR: OBJECT DESIGN. WE -- OBJECTIVITY  
15 WAS THE NAME OF OUR COMPANY. THE COMPETITOR WAS SOMETHING LIKE  
16 OBJECT DESIGN WAS THE NAME.

17 MR. OTTESON: OKAY.

18 PROSPECTIVE JUROR: IT'S AN OBJECT, OR A DATABASE  
19 COMPANY.

20 MR. OTTESON: THANK YOU. I KNOW WE HAVE A NUMBER OF  
21 ENGINEERS AND PEOPLE WHO ARE FAMILIAR WITH SOFTWARE HERE. IS  
22 THERE ANYONE AMONGST THE JURY POOL, IF YOU COULD RAISE YOUR  
23 CARDS, PLEASE, WHO HAS BEEN INVOLVED IN THE DESIGN OF A  
24 MICROPROCESSOR?

25 JUROR NUMBER 2 AND 8.

1 JUROR NUMBER 2, COULD YOU TELL ME A LITTLE BIT ABOUT WHAT  
2 THAT MICROPROCESSOR WAS?

3 PROSPECTIVE JUROR: IT'S ON THE EDGE. WHAT I DID WAS  
4 ACTUALLY CAD, AND SO AS PART OF THE EFFORT, WE'D SUPPORT THE  
5 DEVELOPERS AND THE LIKE. I DID A SMALL AMOUNT OF CIRCUIT  
6 DESIGN AS PART OF THAT. SO -- BUT PRIMARILY I'M THE SOFTWARE  
7 PART OF THE PROCESSING, NOT THE ACTUAL DESIGN.

8 MR. OTTESON: AND WHAT TOOLS DID YOU USE TO DO THE  
9 CIRCUIT DESIGN?

10 PROSPECTIVE JUROR: WELL, WE WROTE THEM.

11 MR. OTTESON: OKAY.

12 PROSPECTIVE JUROR: SO IT WAS -- BERKELEY DID THINGS  
13 LIKE SPICE, WHICH IS A CIRCUIT SIMULATOR, AND I.C. LEVEL LAYOUT  
14 TOOLS. I DID THE DATABASE FOR THEM.

15 MR. OTTESON: SO WHAT WAS THE PART OF THE CIRCUIT  
16 THAT YOU DID FOR THE MICROPROCESSORS, IF YOU RECALL?

17 PROSPECTIVE JUROR: THIS PARTICULAR CASE WAS, WE WERE  
18 JUST DOING -- THEY WERE DOING A PARTICULAR LOW POWER DESIGN AND  
19 I HELPED THEM SIMPLY LAY OUT PART OF THE ALU.

20 MR. OTTESON: PART OF THE ALU?

21 PROSPECTIVE JUROR: YES.

22 MR. OTTESON: THANK YOU.

23 YES, JUROR NUMBER 8. WHAT MICROPROCESSORS HAVE YOU BEEN  
24 INVOLVED IN? OR MAYBE YOU COULD GENERALLY DESCRIBE FOR ME WHAT  
25 YOUR EXPERIENCE IS IN MICROPROCESSOR DESIGN.

1 PROSPECTIVE JUROR: YEAH. ACTUALLY, MY CIRCUIT  
2 DESIGN, THE INTEGRATED CIRCUITS ARE EMBEDDED IN MICROPROCESSOR  
3 CORES. I'M DOING THE DESIGN FOR TESTABILITY FOR -- TO INSERT  
4 THE CIRCUIT TO TEST THE PROCESSOR.

5 MR. OTTESON: OKAY. SO YOU'RE INVOLVED IN MORE  
6 TESTING?

7 PROSPECTIVE JUROR: YES.

8 MR. OTTESON: OKAY. VERY GOOD.

9 HAS ANYBODY ELSE HERE KNOWN ANYONE OR DISCUSSED WITH  
10 ANYONE IN YOUR FAMILY OR FRIENDS PEOPLE WHO HAVE BEEN INVOLVED  
11 IN MICROPROCESSOR DESIGN, BESIDES THE PEOPLE WE'VE HEARD FROM?

12 YES, MA'AM?

13 PROSPECTIVE JUROR: MY HUSBAND WAS AN ENGINEER AT  
14 BROADCOM, BUT I REALLY DIDN'T FOLLOW THE TECHNICAL ISSUES.

15 MR. OTTESON: OKAY. FAIR ENOUGH. THANK YOU.

16 YES, SIR?

17 PROSPECTIVE JUROR: MY PARENTS, THEY USED TO WORK FOR  
18 INTEL AND SO THEY WORKED ON MICROPROCESSORS THERE, MASK DESIGN,  
19 BUT I DON'T KNOW WHAT THEY DID.

20 MR. OTTESON: VERY GOOD. THANK YOU.

21 YES, MA'AM?

22 PROSPECTIVE JUROR: I USED TO WORK AT MARVELL  
23 SEMICONDUCTOR, BUT IN H.R., SO I REALLY HAD NO IDEA WHAT THEY  
24 WERE DOING. BUT I WAS THERE FOR SIX YEARS.

25 MR. OTTESON: OKAY. VERY GOOD. THANK YOU VERY MUCH.

1 HAVE ANY OF YOU EVER APPLIED FOR A PATENT? OR ARE YOU AN  
2 INVENTOR ON A PATENT? OKAY.

3 LET'S SEE. 2, 8, I'M SORRY, OVER HERE, 27. THANK YOU.  
4 ANYBODY ELSE? 20. OKAY.

5 LET'S START WITH YOU, JUROR 20. WHAT IS YOUR PATENT  
6 ABOUT?

7 PROSPECTIVE JUROR: THERE'S LIKE SIX OR SEVEN.

8 MR. OTTESON: SIX OR SEVEN PATENTS?

9 PROSPECTIVE JUROR: YEAH.

10 MR. OTTESON: WHAT'S THE GENERAL --

11 PROSPECTIVE JUROR: THE GENERAL THEME IS HOW DO YOU  
12 SIGNALLING, VOICEOVER IP SIGNALLING, VOICEOVER IP CIRCUIT  
13 SIGNALS. THERE'S ONE PATENT ABOUT READ DESIGN.

14 MR. OTTESON: OKAY. LET'S SEE. JUROR NUMBER 2, HOW  
15 MANY PATENTS HAVE YOU APPLIED FOR OR ARE YOU NAMED ON?

16 PROSPECTIVE JUROR: JUST ONE. I WAS JUST ONE NAME  
17 OF, LIKE, TEN ON IT. IT WAS SOMETHING TO DO WITH REPLICATION  
18 ON DESIGN DATA.

19 MR. OTTESON: OKAY. AND JUROR NUMBER 8?

20 PROSPECTIVE JUROR: IT WAS REGARDING THE TESTABILITY.

21 MR. OTTESON: OH, OKAY.

22 PROSPECTIVE JUROR: YES.

23 MR. OTTESON: SURE. LET'S SEE, DID I MISS ANYBODY  
24 OVER HERE? JUROR NUMBER 27?

25 PROSPECTIVE JUROR: I APPLIED FOR THE INTEL PATENT



1 FOR STREAMING APPLICATIONS OVER THE INTERNET.

2 MR. OTTESON: STREAMING APPLICATIONS OVER THE  
3 INTERNET, THANK YOU.

4 PROSPECTIVE JUROR: EXCUSE ME.

5 MR. OTTESON: YES?

6 PROSPECTIVE JUROR: JUST BACK TO YOUR QUESTION ABOUT  
7 BEING INVOLVED IN A SUIT. I ALSO WAS AN EXPERT WITNESS ON AN  
8 IP, IP CASE WHERE A SOFTWARE -- WHERE I WAS BROUGHT IN AS AN  
9 EXPERT ON PRIOR ART TO SHOW THAT SOME OF THE MAIN CAD SOFTWARE  
10 WE HAD DONE OVERLAPPED WITH THIS PATENT. IT WAS BETWEEN  
11 CADENCE AND MENTOR AS I RECALL.

12 MR. OTTESON: OKAY. AND DO YOU RECALL WHICH PARTY  
13 YOU WERE ALIGNED WITH AS AN EXPERT WITNESS?

14 PROSPECTIVE JUROR: THE DEFENSE, CADENCE, THE PEOPLE  
15 BEING ACCUSED OF VIOLATING THE PATENTS, WHICH I BELIEVE WAS  
16 CADENCE.

17 MR. OTTESON: OKAY. SO YOU PROVIDED SOME EXPERT  
18 WITNESS WORK REGARDING WHETHER THE PATENTS THAT WERE BEING  
19 ASSERTED WERE VALID?

20 PROSPECTIVE JUROR: YEAH. I MEAN, THAT'S A LEGAL  
21 STATEMENT, BUT I WAS JUST -- I JUST GAVE -- I WAS TO GIVE  
22 TESTIMONY ABOUT HOW OUR TOOLS SEEMED TO COVER THE SAME AS THE  
23 PATENT DID. IT NEVER CAME TO TRIAL. IT GOT SETTLED.

24 MR. OTTESON: OKAY. VERY GOOD. THANK YOU.

25 LET ME ASK ALL OF YOU THIS, THIS IS KIND OF A MORE GENERAL

1 QUESTION.

2 MY CLIENTS, AS YOU KNOW, OWN A PATENT AND I'D LIKE TO  
3 KNOW, WITH JUDGE GREWAL'S ADMONITION THAT WE ALL BE HONEST, IF  
4 ANY OF YOU HAVE A PARTICULAR BIAS OR CONCERN ABOUT A PATENT  
5 OWNER ASSERTING THEIR PATENT RIGHTS SUCH THAT YOU WOULD NOT BE  
6 ABLE TO RENDER A DECISION OF INFRINGEMENT IF YOU THOUGHT THE  
7 FACTS AND THE EVIDENCE SUPPORTED IT.

8 PROSPECTIVE JUROR: WELL, I GENERALLY DON'T, YOU  
9 KNOW, KIND OF UNDERSTAND ABOUT THE PATENT.

10 MR. OTTESON: I'M SORRY. CAN YOU SPEAK UP A LITTLE  
11 BIT? THANK YOU.

12 PROSPECTIVE JUROR: YEAH. SO KIND OF -- I HAVE  
13 TROUBLE -- IN CERTAIN CASES, I DON'T UNDERSTAND THE PATENT.  
14 FOR EXAMPLE, FOR A DRUG PATENT.

15 MR. OTTESON: FOR A DRUG PATENT?

16 PROSPECTIVE JUROR: YEAH, FOR A DRUG PATENT, THE  
17 COMPANY SPEND SO MUCH TIME DOING RESEARCH, BILLIONS OF DOLLARS  
18 TO GET THIS VALID PATENT.

19 BUT I'VE SEEN CASES WHERE PEOPLE APPLYING FOR SOFTWARE  
20 PATENTS AND THERE WASN'T EVEN ANY IMPLEMENTATION. IT'S JUST SO  
21 THE IDEA AND THERE WAS A PATENT RIGHT.

22 AND SO -- AND SOME PATENTS, THEY ARE -- THEY'RE VERY  
23 SPECIFIC IN CERTAIN AREAS AND SO IT'S LIKE, YOU KNOW, IF PEOPLE  
24 HAVE -- SOME PEOPLE COME UP WITH THE SAME IDEA, JUST PROBABLY A  
25 COUPLE MONTHS LATER OR A FEW WEEKS LATER, THEY HAVE TO PAY THIS

1 PERSON FOR PATENT. THAT'S SOMETHING I DON'T QUITE UNDERSTAND.

2 MR. OTTESON: OKAY.

3 PROSPECTIVE JUROR: SO I'M A SOFTWARE ENGINEER AND  
4 THESE DAYS THERE'S A LOT OF OPEN SOURCE AND THINGS LIKE THAT.  
5 SO FROM, YOU KNOW -- I HAVE SOME HARD TIME.

6 MR. OTTESON: OKAY. SO I APPRECIATE THAT, JUROR 20,  
7 AND I APPRECIATE YOUR HONESTY.

8 LET ME ASK YOU THIS: IF YOU FELT LIKE THE EVIDENCE IN  
9 THIS CASE SHOWED THAT THERE WAS A REAL INVENTION AND A PATENT  
10 THAT WAS INFRINGED BY HTC, WOULD YOU HAVE A PROBLEM FINDING  
11 INFRINGEMENT?

12 PROSPECTIVE JUROR: WELL, I KNOW THAT IN SOME CASES,  
13 YOU KNOW, PEOPLE, THEY HAVE SOURCE CODE THAT THEY DEVELOP AT  
14 ONE COMPANY, AND WHEN THEY BRING THE SOURCE CODE TO ANOTHER  
15 COMPANY, THAT'S A DIFFERENT ISSUE.

16 BUT IF IT'S JUST IDEA, THAT'S -- AND IT'S -- I THINK IT'S  
17 VERY HARD TO MANAGE THAT MANY PATENTS OUT THERE.

18 MR. OTTESON: OKAY.

19 PROSPECTIVE JUROR: YEAH. SO --

20 MR. OTTESON: FAIR ENOUGH.

21 PROSPECTIVE JUROR: AND THE IDEA, YOU KNOW, IF  
22 SOMEBODY ACTUALLY CAME UP WITH THE IDEA INDEPENDENTLY, BUT  
23 SOMEHOW THEY FAILED TO DISCOVER THAT THERE'S A PATENT, THEN  
24 THEY END UP HAVING TO PAY FOR THE PATENT, SO I HAVE TROUBLE.

25 I WAS A MATHEMATICIAN. THE DISCOVERY -- I GUESS A LOT OF

1 PEOPLE KNOW ABOUT THE DISCOVERY OF CALCULUS. SO I THINK AT THE  
2 END, YOU KNOW, IT'S A DISPUTE BETWEEN WHETHER NEWTON OR, WHAT'S  
3 HIS NAME AGAIN, INVENTED CALCULUS. THERE COULD BE LIKE 20, 30  
4 YEARS APART.

5 MR. OTTESON: UNDERSTOOD.

6 PROSPECTIVE JUROR: BUT AT THE END, WE SAY THAT  
7 THEY'RE THE CO-FOUNDER OF CALCULUS.

8 MR. OTTESON: SURE.

9 PROSPECTIVE JUROR: SO --

10 MR. OTTESON: THANK YOU VERY MUCH. I APPRECIATE YOUR  
11 CANDOR. THANK YOU.

12 JUROR NUMBER, IS IT 26? DID YOU HAVE A --

13 PROSPECTIVE JUROR: NO.

14 MR. OTTESON: OKAY. THANK YOU. YES?

15 PROSPECTIVE JUROR: MAYBE A QUESTION FOR THE JUDGE.

16 THE OUTCOME OF THIS TRIAL IS TO DETERMINE INFRINGEMENT ON  
17 A PATENT, NOT WHETHER A PATENT IS REASONABLE OR SHOULD HAVE  
18 BEEN ISSUED IN THE FIRST PLACE? IS THAT CORRECT?

19 THE COURT: WELL, I WILL GIVE YOU, THE JURORS WHO ARE  
20 SELECTED, A COMPLETE EXPLANATION OF THE PARTICULAR ISSUES AT  
21 HAND.

22 WHAT I'D LIKE YOU ALL TO FOCUS ON FOR THE MOMENT IS THE  
23 SPECIFIC QUESTIONS THAT THE LAWYERS ARE PUTTING TO YOU. I  
24 APPRECIATE MANY OTHER QUESTIONS ARE GOING THROUGH YOUR MIND.

25 MR. OTTESON, DO YOU WANT TO PUT A SPECIFIC QUESTION TO

1 THIS JUROR OR DO YOU WANT TO MOVE ON?

2 MR. OTTESON: I THINK I'M PRETTY GOOD FOR NOW. I WAS  
3 WONDERING IF THE COURT WILL INDULGE ME TO LET MY PARTNER,  
4 MR. MARSH, ASK A QUESTION OF COUPLES.

5 THE COURT: MR. MARCH, YOU MAY PROCEED.

6 MR. MARSH: GOOD MORNING, STILL BARELY.

7 THANK YOU SO MUCH FOR YOUR TIME TODAY. I KNOW IT'S BEEN  
8 SOMEWHAT OF A LONG MORNING, BUT WE APPRECIATE YOUR TIME. THIS  
9 IS A VERY IMPORTANT ISSUE FOR OUR CLIENTS, OF COURSE.

10 I'D LIKE TO ASK YOU A COUPLE OF QUESTIONS ABOUT  
11 TECHNOLOGY, AND I GUESS IF YOU FEEL LIKE YOU ARE INTERESTED IN  
12 TECHNOLOGY, COULD YOU PLEASE HOLD UP YOUR NUMBERS.

13 I WOULD SAY IT'S THE MAJORITY OF THE PEOPLE.

14 OKAY. AND LIKEWISE, IF YOU FEEL INTIMIDATED BY  
15 TECHNOLOGY, COULD YOU HOLD UP YOUR NUMBER CARD, PLEASE?

16 WE HAVE 9, 3, 12, 13, 14 -- OKAY, SO SEVERAL.

17 LET ME ASK YOU, JUROR NUMBER 3, WHO IS IT ABOUT TECHNOLOGY  
18 THAT YOU FEEL INTIMIDATED ABOUT?

19 PROSPECTIVE JUROR: I'VE BEEN IN SILICON VALLEY SINCE  
20 THE '80S, '86 TO BE EXACT, AND I'VE ALWAYS BEEN IN OPERATIONS,  
21 PROCUREMENT AND OPERATIONS. BUT I WORK WITH TECHNOLOGY  
22 COMPANIES. SO I'M NOT AN ENGINEER.

23 MR. MARSH: OKAY. FAIR ENOUGH.

24 WHO ELSE DID WE HAVE? WE HAVE A COUPLE HERE ON THE FRONT  
25 ROW WHO ARE INTIMIDATED BY TECHNOLOGY. MA'AM?

1 PROSPECTIVE JUROR: I DON'T UNDERSTAND IT.

2 MR. MARSH: OKAY. I CAN SYMPATHIZE. THERE ARE SOME  
3 TECHNOLOGIES I DON'T UNDERSTAND AS WELL.

4 WHO ELSE WAS INTIMIDATED BY TECHNOLOGY? JUROR NUMBER 14.

5 PROSPECTIVE JUROR: I JUST DON'T -- I DON'T KNOW HOW  
6 TO EXPLAIN IT.

7 MR. MARSH: LET ME ASK YOU THIS: OF THOSE WHO HELD  
8 UP THEIR NUMBERS FOR BEING INTIMIDATED BY TECHNOLOGY, IF YOU  
9 HAD AN OPPORTUNITY TO BE, TO HAVE THE TECHNOLOGY EXPLAINED TO  
10 YOU, WOULD THAT BE SOMETHING THAT YOU WOULD BE INTERESTED IN?  
11 IF YOU HELD UP YOUR NUMBER BEFORE AND YOU WOULD BE INTERESTED  
12 IN UNDERSTANDING THE TECHNOLOGY, COULD YOU HOLD UP YOUR NUMBER  
13 AGAIN, PLEASE.

14 OKAY. JUROR NUMBER 9. OKAY.

15 LET ME ASK YOU THIS: HOW MANY PEOPLE PLAY MUSIC? COULD  
16 YOU HOLD UP YOUR NUMBER FOR ME, PLEASE?

17 PROSPECTIVE JUROR: WHAT DO YOU MEAN?

18 MR. MARSH: EXCUSE ME. PLAY AN INSTRUMENT OR READ  
19 MUSIC OR SING.

20 OKAY. THANK YOU.

21 ONE QUESTION I HAVE FOR YOU IS IF YOU WERE SELECTED TO BE  
22 ON THE JURY AND YOU WERE CHOSEN, YOU WERE CHOSEN AND YOU  
23 LISTENED TO THE CASE AND YOU WENT BACK AND DELIBERATED AT THE  
24 END OF THE CASE, I'M CURIOUS IF YOU WOULD VIEW YOURSELF AS A  
25 LEADER OR A FOLLOWER, AND SO I WONDER, IF YOU FEEL LIKE YOU

1 WOULD BE A FOLLOWER, MORE OF A -- LET ME ASK FIRST ABOUT  
2 LEADERS.

3 WHO FEELS LIKE THEY WOULD BE MORE OF A LEADER IN THE JURY  
4 ROOM, IN THE DISCUSSIONS, IN THE DELIBERATIONS ABOUT HOW THE  
5 CASE SHOULD COME OUT? WHO FEELS LIKE THEY WOULD BE A LEADER IN  
6 THAT CONTEXT?

7 OKAY. SO WE HAVE 2, 4, 6, 10, 17, 18, 21, 24, 36, 29, AND  
8 39. THANK YOU.

9 WHO FEELS LIKE THEY WOULD BE MORE OF A FOLLOWER IN THE  
10 JURY DELIBERATIONS? IF YOU COULD HOLD UP YOUR NUMBERS, PLEASE?

11 OKAY. SO 9, 8, 11, 12, 13, 14, 7, AND IS IT 5? JUROR  
12 NUMBER 5? 20, 26, 37, 38, 31, 40, 41, 42, AND 45.

13 OKAY. THANK YOU.

14 WHO FEELS LIKE THEY -- AND 13, DID I MISS YOU?

15 PROSPECTIVE JUROR: NO, I THINK YOU GOT IT.

16 MR. MARSH: WHO FEELS LIKE THEY WOULD BE NEITHER A  
17 LEADER FOR A FOLLOWER? JUST KIND OF NEUTRAL? 1, 3, 9, 15, 16,  
18 17 --

19 PROSPECTIVE JUROR: I DIDN'T KNOW THAT WAS ONE OF THE  
20 OPTIONS.

21 MR. MARSH: I DIDN'T SAY THAT. FAIR ENOUGH. OKAY.  
22 SO YOU WANT TO CHANGE YOUR ANSWER?

23 PROSPECTIVE JUROR: YES.

24 MR. MARSH: OKAY. AND 7 WANTS TO CHANGE THEIR ANSWER  
25 TOO. 7 AND 12 AS WELL, AND 24, 21, 22, 33, 33, 34, 37, 27, 28,

1 29, 30, AND 42.

2 THANK YOU VERY MUCH. THAT'S ALL THE QUESTIONS I HAVE.

3 THANK YOU VERY MUCH FOR YOUR TIME, LADIES AND GENTLEMEN.

4 THE COURT: THANK YOU, MR. MARSH.

5 MS. KEEFE.

6 MS. KEEFE: THANK YOU, YOUR HONOR.

7 THANK YOU, LADIES AND GENTLEMEN. AND AGAIN, THANK YOU FOR  
8 YOUR SERVICE. WE ALL REALLY DO APPRECIATE HOW MUCH TIME THIS  
9 IS TAKING AND KIND OF DRONING ON WITHOUT KNOWING WHAT  
10 EVERYTHING IS GOING TO BE ABOUT AS IT GOES ON, BUT WE REALLY DO  
11 APPRECIATE IT.

12 THE FIRST QUESTION I'D LIKE TO ASK YOU IS ACTUALLY KIND OF  
13 ALONG THE LINES OF SOME OF THE THINGS YOU WERE HEARING.  
14 INSTEAD OF THE QUESTION OF HOW MANY OF YOU HAVE PATENTS, IS  
15 THERE ANYBODY OUT THERE THAT ACTUALLY FANCIES THEMSELVES AN  
16 INVENTOR? DOESN'T MEAN YOU HAVE A PATENT, BUT MAYBE YOU'VE  
17 COME UP WITH SOMETHING GREAT OR SOMETHING NEW. DO WE HAVE ANY  
18 INVENTORS IN THE MIX?

19 SO MR. MCMASTERS, WHAT HAVE YOU INVENTED?

20 PROSPECTIVE JUROR: TWENTY YEARS AGO I INVENTED  
21 HYBRID TECHNOLOGY TO REGENERATE THE BATTERY. I COME UP WITH  
22 LITTLE IDEAS ALL THE TIME, SOME OF THEM PRACTICAL FOR THE HOME,  
23 BUT THAT WAS LIKE PROBABLY THE BIGGEST THING THAT I CAME UP  
24 WITH PROBABLY 25 OR 30 YEARS AGO, BECAUSE I DRIVE UP A HILL AND  
25 DRIVE DOWN A HILL AT THE END OF THE DAY, AND I WAS LIKE, WHY



1 CAN'T I GET THAT ENERGY BACK?

2 AS FAR AS ACTUALLY ENGINEERING ANY OF IT, IT WAS JUST AN  
3 IDEA.

4 MS. KEEFE: AND DID YOU ACTUALLY BUILD IT?

5 PROSPECTIVE JUROR: DIDN'T BUILD ANYTHING, JUST COME  
6 UP WITH LITTLE IDEAS FREQUENTLY.

7 MS. KEEFE: OKAY. THANK YOU VERY MUCH.

8 AND MR. SINA, I THINK I SAW YOUR HAND UP, TOO.

9 PROSPECTIVE JUROR: SINGUR. FREQUENTLY I HAVE  
10 SOMETHING ON THE DRAWING BOARD?

11 MS. KEEFE: IT'S JUST IF YOU CONSIDERED YOURSELF AN  
12 INVENTOR. I THINK YOU MENTIONED PATENTES, BUT DO YOU HAVE  
13 OTHER THINGS THAT YOU'VE INVENTED?

14 PROSPECTIVE JUROR: YES.

15 MS. KEEFE: AND WHAT OTHER TYPES OF THINGS HAVE YOU  
16 INVENTED?

17 PROSPECTIVE JUROR: SOFTWARE TECHNOLOGY AND SERVER  
18 TECHNOLOGIES, SERVER, SOFTWARE SERVERS.

19 MS. KEEFE: SOFTWARE SERVERS. THANK YOU VERY MUCH.

20 ANYONE ELSE? YES, PLEASE.

21 PROSPECTIVE JUROR: I'M AN ACTIVE TINKERER,  
22 CONSTANTLY WORKING ON IMPROVING THINGS OR CHANGING AND  
23 MODIFYING, SOMETIMES COMING UP WITH STUFF ON MY OWN. IT'S ALL  
24 GPL OR THREE -- THAT'S IT.

25 MS. KEEFE: THANK YOU, MR. JENSEN, VERY MUCH.

1 OKAY, IN THE FRONT?

2 PROSPECTIVE JUROR: SOFTWARE DESIGN OF -- I THINK I  
3 COME UP WITH GOOD IDEAS, BUT NEVER THOUGHT IT WAS FOR A PATENT.

4 MS. KEEFE: THANK YOU VERY MUCH.

5 THE NEXT QUESTION, KIND OF GETTING MAYBE A LITTLE BIT AWAY  
6 FROM TECHNOLOGY, OR MAYBE NOT, I WANT TO KNOW HOW EVERYBODY  
7 GETS THEIR INFORMATION NOWADAYS. YEARS AGO WHEN I STARTED  
8 DOING THIS, I WOULD ASK WHAT NEWSPAPERS EVERYONE READS, BUT  
9 UNFORTUNATELY THAT'S KIND OF CHANGED BECAUSE I THINK A LOT OF  
10 PEOPLE GET THEIR NEWS VERY DIFFERENTLY TODAY.

11 HOW MANY OF YOU GET YOUR PRIMARY SOURCE OF NEWS FROM A  
12 NEWSPAPER?

13 AND THIS IS AMAZING, RIGHT? IF WE HAD DONE THIS JUST A  
14 FEW YEARS AGO, THAT WOULD HAVE BEEN A VERY DIFFERENT NUMBER OF  
15 CARDS UP.

16 HOW MANY OF YOU GET YOUR PRIMARY SOURCE OF INFORMATION  
17 FROM THE TELEVISION?

18 AND HOW MANY OF THE REST OF YOU GET YOUR PRIMARY SOURCE OF  
19 INFORMATION FROM THE INTERNET?

20 AND OF THOSE OF YOU WHO GET IT FROM THE INTERNET, HOW MANY  
21 OF YOU ACTUALLY GET YOUR PRIMARY SOURCE OF INFORMATION FROM  
22 THAT SMARTPHONE THAT YOU CARRY AROUND?

23 SO MS. SCOTT, HOW OFTEN A DAY DO YOU GO ON YOUR SMARTPHONE  
24 TO LOOK UP THE NEWS OR ANYTHING ELSE?

25 PROSPECTIVE JUROR: EVERY DAY.

1 MS. KEEFE: EVERY DAY. MORE THAN ONCE A DAY?

2 PROSPECTIVE JUROR: NO, PROBABLY NOT.

3 MS. KEEFE: BUT IT'S SOMETHING THAT YOU USE EVERY  
4 DAY?

5 PROSPECTIVE JUROR: UM-HUM.

6 MS. KEEFE: AND WHO ELSE SAID THEY GO ON THEIR  
7 SMARTPHONE TO GET THEIR PRIMARY SOURCE?

8 MS. CHILDRESS, HOW OFTEN A DAY DO YOU GO ON TO LOOK AT  
9 THE NEWS?

10 PROSPECTIVE JUROR: I WOULD SAY AT LEAST FIVE OR SIX  
11 TIMES.

12 MS. KEEFE: ANYONE ELSE?

13 YES, MS. BENOIT.

14 PROSPECTIVE JUROR: BENOIT.

15 MS. KEEFE: BENOIT, SORRY.

16 PROSPECTIVE JUROR: FIVE TO TEN TIMES A DAY. I'M  
17 CONSTANTLY CHECKING IT.

18 MS. KEEFE: OKAY. THANK YOU VERY MUCH.

19 NOW, I ALSO NOTICE THAT A LOT OF YOU LISTED READING AS ONE  
20 OF YOUR FAVORITE HOBBIES, AND I KNOW THAT SOME OF YOU WHO  
21 DIDN'T EVEN LIST IT PROBABLY DO STILL HAVE IT AS ONE OF YOUR  
22 FAVORITE HOBBIES.

23 I'M GOING TO ASK YOU A DEEP, SOUL SEARCHING KIND OF A  
24 QUESTION HERE. HOW MANY OF YOU ARE THE KINDS OF PEOPLE THAT  
25 HAVE YOUR BOOK, FAVORITE BOOK, IT'S AMAZING, YOU'RE ENJOYING

1 IT, BUT YOU JUST CAN'T RESIST, YOU HAVE TO TURN TO THE END OF  
2 THE BOOK AND READ THE LAST PAGE BEFORE YOU FINISH IT? ANYBODY?

3 WOW. THAT'S IMPRESSIVE, BECAUSE IT ACTUALLY GOES TO THE  
4 VERY NEXT QUESTION WHICH I HAVE WHICH IS VERY GENERAL.

5 IN THIS CASE, WE GET TO TALK SECOND ALL THE TIME, AND SO  
6 HOW MANY OF YOU HAVE HEARD OF AN OLD RADIO ANNOUNCER NAMED  
7 PAUL HARVEY? ANYBODY REMEMBER THE PAUL HARVEY THINGS?

8 PROSPECTIVE JUROR: NOW YOU KNOW THE REST OF THE  
9 STORY.

10 MS. KEEFE: THE REST OF THE STORY, EXACTLY.

11 SO FOR THOSE OF YOU WHO HAVEN'T HEARD OF PAUL HARVEY, HE  
12 USED TO TELL STORIES, AND HE WOULD TELL STORIES ABOUT THINGS  
13 THAT MOST PEOPLE KIND OF KNEW OR KIND OF RECOGNIZED AND YOU  
14 THOUGHT YOU KNEW WHAT IT WAS ALL ABOUT.

15 AND THEN HE'D TELL THE STORY, AND HE DID IT IN A GREAT  
16 WAY SO YOU WANTED TO LISTEN TO IT, AND THEN RIGHT AT THE END  
17 THERE WOULD BE SOME CRAZY TWIST, AND THEN HE'D SAY, "SO NOW YOU  
18 KNOW THE REST OF THE STORY."

19 SO WHAT I NEED IS A SHOW OF HANDS FROM ALL OF YOU, IS  
20 THERE ANYONE HERE WHO FEELS LIKE THEY JUST CAN'T WAIT TO HEAR  
21 THE REST OF THE STORY, THAT THEY CAN'T GIVE US A CHANCE ON  
22 BEHALF OF HTC TO MAKE SURE THAT YOU WAIT AND LISTEN TO OUR  
23 PART, WHICH IS THE REST OF THE STORY, THAT YOU'RE NOT GOING TO  
24 DO A JUDGMENT FIRST?

25 IS THERE ANYONE HERE WHO FEELS LIKE THEY COULDN'T QUITE DO

1 THAT? IT WOULD BE REALLY HARD TO JUST LISTEN AND PUT YOUR  
2 FEELINGS ASIDE UNTIL AFTER WE HAD A CHANCE TO TALK?

3 WOW, THAT'S GREAT, AND WE VERY MUCH APPRECIATE IT BECAUSE  
4 IT'S SO VERY IMPORTANT.

5 SO I JUST HAD A COUPLE OF MORE QUESTIONS.

6 I KNOW A FEW OF YOU HAVE OBVIOUSLY WORKED WITH TAIWANESE  
7 COMPANIES. A FEW OF YOU ACTUALLY COME FROM TAIWAN.

8 HAS ANYONE EVER DEALT WITH OR WORKED WITH A TAIWANESE  
9 COMPANY WHO HASN'T HAD A CHANCE TO MENTION IT YET? ANYONE?

10 YES, MR. JENSEN?

11 PROSPECTIVE JUROR: I SET UP SEMICONDUCTOR EQUIPMENT  
12 IN HSINCHU FOR QUITE A FEW SEMICONDUCTOR COMPANIES.

13 MS. KEEFE: AND DID YOU HAVE ANYTHING OTHER THAN  
14 RELATIVELY POSITIVE EXPERIENCES WITH THE TAIWANESE COMPANIES  
15 THAT YOU WORKED WITH?

16 PROSPECTIVE JUROR: ALWAYS POSITIVE.

17 MS. KEEFE: ALWAYS POSITIVE.

18 ANYONE ELSE? YES, MS. WAHLER?

19 PROSPECTIVE JUROR: WELL, THE START-UP COMPANY THAT I  
20 WORK FOR, I DON'T KNOW IF THIS IS RELEVANT, BUT WE ARE HIRING  
21 SOMEBODY TO WORK OUT OF TAIWAN TO WORK WITH US IN OUR LARGER,  
22 ONE OF OUR LARGER CUSTOMERS.

23 MS. KEEFE: THAT'S GREAT. AND JUST MAKING SURE THAT  
24 THERE'S NOTHING NEGATIVE ABOUT THAT OR ANYTHING THAT, OTHER  
25 THAN A POSITIVE --

1 PROSPECTIVE JUROR: NO.

2 MS. KEEFE: -- FEELING FOR THE TAIWANESE COMPANY  
3 YOU'RE WORKING WITH.

4 ANYONE ELSE? YES? SORRY, I KNOW I HAVE IT HERE,  
5 MR. CASKEY?

6 PROSPECTIVE JUROR: YES. I'M A SENIOR PROJECT  
7 MANAGER AND I DID A BUILD OUT FOR A TAIWANESE COMPANY ABOUT A  
8 YEAR AGO.

9 MS. KEEFE: AND THE SAME QUESTION. DO YOU HAVE ANY  
10 POSITIVE FEELINGS ABOUT THAT?

11 PROSPECTIVE JUROR: I HAD MOSTLY NEGATIVE FEELINGS.  
12 THEY WERE VERY DIFFICULT TO WORK FOR. THEY DIDN'T UNDERSTAND  
13 CONSTRUCTION CONCEPTS. IT WAS A VERY DIFFICULT PROJECT.

14 MS. KEEFE: WOULD YOU HAVE A HARD TIME IN THIS CASE  
15 PUTTING ASIDE THOSE MEMORIES IN ORDER TO GIVE HTC A FAIR SHAKE  
16 HERE?

17 PROSPECTIVE JUROR: I CAN'T REALLY ANSWER THAT. I  
18 JUST --

19 MS. KEEFE: THANK YOU.

20 PROSPECTIVE JUROR: I COULD BE BIASED.

21 MS. KEEFE: I VERY MUCH APPRECIATE YOUR HONESTY.  
22 THAT'S WHY WE'RE ASKING THESE QUESTIONS.

23 DOES ANYONE ELSE FEEL LIKE, NOT BECAUSE YOU'VE WORKED  
24 WITH THEM OR NOT, BUT JUST THINGS YOU'VE HEARD OF THEM IN THE  
25 PRESS OR THINGS YOU'VE SEEN IN THE MOVIES, LIKE THEY HAVE ANY

1 KIND OF A NEGATIVE IMPRESSION OF TAIWANESE COMPANIES OR  
2 TAIWANESE BUSINESS PEOPLE?

3 YES, PLEASE.

4 PROSPECTIVE JUROR: SORRY. I FORGOT TO MENTION  
5 BEFORE, WE HAVE A COMPANY, MY COMPANY HAS A PARTNER IN TAIWAN  
6 CALLED SYSTEX.

7 MS. KEEFE: OKAY.

8 PROSPECTIVE JUROR: AND IN GENERAL THE IMPRESSION IS  
9 THEY MAKE A LOT OF NOISE, BUT --

10 MS. KEEFE: A LOT OF NOISE WITHOUT RESULTS.

11 AND WOULD YOU HAVE A HARD TIME BEING FAIR TO HTC IN THIS  
12 CASE?

13 PROSPECTIVE JUROR: NO.

14 MS. KEEFE: I'M SORRY, WHAT?

15 PROSPECTIVE JUROR: NO.

16 MS. KEEFE: NO. THANK YOU, MS. JOSHI.

17 ANYONE ELSE?

18 I THINK HONESTLY THAT'S ALL THE QUESTIONS THAT I HAVE. I  
19 WANT TO MAKE SURE THAT WE GET YOU OUT TO LUNCH PRETTY EARLY.  
20 SO AGAIN, THANK YOU FOR YOUR TIME, HONESTY, AND YOUR INTEREST.

21 THE COURT: THANK YOU, MS. KEEFE.

22 LADIES AND GENTLEMEN, IT IS TIME FOR LUNCH. LET ME  
23 EXPLAIN TO YOU THE SCHEDULE WE'RE GOING TO KEEP THIS AFTERNOON.

24 I'M GOING TO ASK THAT YOU ALL RETURN TO THE COURTROOM AT  
25 1:30 THIS AFTERNOON. AT THAT TIME WE WILL INFORM EACH AND

1 EVERY ONE OF YOU WHETHER YOU WILL BE SERVING IN THE JURY, OR ON  
2 THE JURY IN THIS CASE.

3 OVER THAT PERIOD OF TIME, I CAN ASSURE YOU, THE LAWYERS  
4 AND I ARE GOING TO BE DOING SOME WORK, BUT YOU WILL HAVE UNTIL  
5 1:30 TO GET YOUR LUNCH, TO GET OUTSIDE AND THEN RETURN BACK  
6 HERE.

7 YOU'RE GOING TO HEAR ME GIVE THIS INSTRUCTION A LOT OVER  
8 THE NEXT FEW DAYS, FOR THOSE OF YOU WHO ARE SELECTED ANYWAY.

9 WHILE YOU'RE OUT ON BREAK, I DON'T WANT YOU TO TALK ABOUT  
10 ANY OF THE SUBSTANCE OF WHAT WE'VE DISCUSSED HERE IN THE  
11 COURTROOM, AND THE REASON FOR THIS IS VERY STRAIGHTFORWARD.  
12 SCIENCE TEACHES US THAT THE MINUTE WE BEGIN TO TALK ABOUT EVEN  
13 THE SMALLEST DETAIL ABOUT SOMETHING THAT WE'VE SEEN OR HEARD,  
14 WE BEGIN TO FORM OPINIONS ABOUT THAT AND WE DON'T WANT YOU TO  
15 DO THAT. WE WANT YOU TO KEEP AN OPEN MIND AS WE GO FORWARD  
16 WITH THIS PROCEEDING, SO DON'T TALK ABOUT THE CASE WHILE YOU'RE  
17 ON A BREAK.

18 ENJOY YOUR LUNCH. WE'LL SEE YOU BACK HERE AT 1:30 IN THE  
19 AFTERNOON.

20 IF COUNSEL WOULD STAY, I'D LIKE TO ADDRESS SOME ISSUES  
21 WITH YOU BEFORE WE BREAK.

22 (PROSPECTIVE JURORS OUT AT 12:09 P.M.)

23 THE COURT: ALL RIGHT. PLEASE BE SEATED.

24 COUNSEL, LET ME SUGGEST THAT WE PROCEED AS FOLLOWS: I'D  
25 LIKE TO GIVE YOU A LITTLE BIT OF TIME TO PROCESS AND DIGEST



1 EVERYTHING THAT YOU'VE JUST HEARD, AND SO I WOULD PROPOSE THAT  
2 WE RECONVENE HERE IN COURT AT 1:00 O'CLOCK TO DO THE HARDSHIP,  
3 CAUSE, AND PEREMPTORY CHALLENGES. I DON'T THINK IT'LL TAKE  
4 MORE THAN HALF AN HOUR.

5 I'D LIKE TO DO IT HERE IN COURT SO WE DON'T HAVE TO ALL  
6 PICK UP AND MOVE INTO CHAMBERS OR DO SOMETHING ALONG THOSE  
7 LINES.

8 SO UNLESS THERE'S ANY OBJECTION, WILL THAT GIVE YOU ENOUGH  
9 TIME TO GET A BITE, THINK ABOUT WHAT YOU'VE JUST HEARD, AND  
10 THEN EXERCISE YOUR --

11 MR. OTTESON: THAT'S FINE WITH US.

12 THE COURT: MS. KEEFE?

13 MS. KEEFE: THAT'S FINE. I WAS WONDERING IF YOUR  
14 HONOR HAD ANY THOUGHTS ON CAUSE BEFORE THAT TO HELP US MAKE OUR  
15 EVALUATIONS.

16 THE COURT: WELL, I'M HAPPY TO SHARE WITH YOU MY  
17 VIEWS TO GIVE YOU SOME SENSE OF WHAT YOU OUGHT TO FOCUS YOUR  
18 ATTENTION ON IF THAT'S WHAT YOU'RE GETTING AT.

19 MR. LEMIEUX: THAT'S EXACTLY WHAT I WAS ASKING, YOUR  
20 HONOR.

21 MR. HOGE: YOUR HONOR, I HAVE A DISCLOSURE ITEM.

22 THE COURT: GO AHEAD, SIR.

23 MR. HOGE: MY DAUGHTER WAS A SUMMER ASSOCIATE AT  
24 KRAMER, LEVIN IN NEW YORK. SHE DIDN'T INTERACT AS FAR AS I  
25 KNOW WITH ANYBODY IN PALO ALTO, BUT THERE'S A POSSIBLY THAT

1 MR. LEE SAW MY DAUGHTER'S NAME ON SOMETHING.

2 THE COURT: MAY I ASK YOU, HOW LONG AGO WAS SHE A  
3 SUMMER?

4 MR. HOGE: SHE WAS JUST A SUMMER. SHE'S A THIRD YEAR  
5 LAW STUDENT NOW.

6 THE COURT: OKAY. I APPRECIATE THAT. I APPRECIATE  
7 THAT.

8 ALL RIGHT. WELL, AS FAR AS CAUSES GO, FRANKLY, THE ONLY  
9 CAUSE CHALLENGE I AM INCLINED TO GRANT DEALS WITH JUROR NUMBER  
10 16, MR. CASKEY, AND HIS -- IN LIGHT OF HIS COMMENTS REGARDING  
11 HIS EXPERIENCE ON THE BUILD OUT WITH THE TAIWANESE FIRM.

12 THERE ARE A NUMBER OF ADDITIONAL JURORS WHO I'M INCLINED  
13 TO EXCUSE FOR HARDSHIP REASONS. LET ME GIVE YOU THAT LIST AS  
14 WELL. I DON'T WANT TO HEAR ARGUMENTS NOW. I WANT TO DO THAT  
15 AT 1:00 O'CLOCK, BUT HERE'S WHERE I'M CURRENTLY AT.

16 JUROR NUMBER 1, I'M INCLINED TO GRANT -- TO EXCUSE FOR  
17 HARDSHIP REASONS. HE HAS NO ONE TO RUN HIS BUSINESS IF HE'S  
18 SITTING HERE.

19 JUROR NUMBER 7, I BELIEVE, HAS A SIGNIFICANT ENOUGH  
20 MEDICAL ISSUE THAT SITTING AS A JUROR IN THIS CASE WOULD BE  
21 UNFAIR AND UNWISE.

22 JUROR NUMBER 12 ALSO RUNS A SMALL BUSINESS. I DON'T LIKE  
23 TO SEE PEOPLE LOSING A DAY'S PAY IF WE DON'T HAVE TO GO THAT  
24 FAR, SO I'M INCLINED TO GIVE HER HER DISMISSAL.

25 JUROR NUMBER 14 INDICATED THAT SHE NEEDS TO BE BACK IN

1 MONTEREY BAY AT 4:00 O'CLOCK. THAT WOULD REQUIRE ME TO CUT THE  
2 TRIAL DAY BY SEVERAL HOURS, OR AT LEAST A COUPLE OF HOURS. I'M  
3 NOT INCLINED TO DO THAT.

4 JUROR NUMBER 18 INDICATED SHE HAS A TWO AND A HALF HOUR  
5 DRIVE EACH WAY EACH DAY FROM SOUTH SALINAS. I GO TO SALINAS  
6 REGULARLY. I CAN ATTEST TO THAT DRIVE. AND SO I'M INCLINED TO  
7 EXCUSE HER AS WELL.

8 JUROR NUMBER 21, SHE IS THE FAMILY LAW PRACTITIONER, SHE  
9 INDICATED THAT SHE HAS A NUMBER OF OTHER COURT APPOINTMENTS AND  
10 APPEARANCES SCHEDULED. ON THAT BASIS, I'M INCLINED TO GRANT  
11 HER A DISMISSAL FOR HARDSHIP PURPOSES.

12 JUROR NUMBER 28 INDICATED SHE HAS A WORK CONFLICT THAT I  
13 BELIEVE WOULD WARRANT DISMISSAL FOR HARDSHIP PURPOSES.

14 JUROR NUMBER 32 HAS CHILD CARE ISSUES DOWN IN SANTA CRUZ.  
15 AGAIN, I'M NOT INCLINED TO KEEP PEOPLE FROM PICKING UP THEIR  
16 KIDS UNLESS WE NEED HER, SO I WOULD PROPOSE TO DISMISS HER.

17 JUROR NUMBER 34 INDICATED THAT SHE IS NOT GOING TO BE  
18 REIMBURSED FOR HER JURY SERVICE. AGAIN, I DON'T LIKE TO PUT  
19 PEOPLE IN A POSITION WHERE THEY'RE TRYING TO WEIGH YOUR  
20 ARGUMENTS AND LISTEN TO TESTIMONY WHEN THEY'RE WORRIED ABOUT  
21 WHERE THEIR PAYCHECK IS GOING TO COME FROM.

22 JUROR NUMBER 38 ALSO INDICATED A HARDSHIP WITH RESPECT TO  
23 COVERAGE AT WORK.

24 JUROR NUMBER 40 INDICATED HE'S TAKING TWO FOSTER CHILDREN  
25 TO MINNESOTA ON AN AIRPLANE.

1 JUROR NUMBER 44, AGAIN, INDICATED SHE DOES NOT GET PAID IF  
2 SHE SERVES AS A JUROR.

3 AND JUROR NUMBER 45 INDICATED THAT HE HAS CLASSES THAT HE  
4 WOULD MISS AND THE POTENTIAL TO BE PUT BACK A SEMESTER IF HE  
5 WERE TO ATTEND.

6 SO THAT'S MY PRELIMINARY THINKING ABOUT HARDSHIP AND  
7 CAUSE.

8 AGAIN, YOU CAN TAKE THE NEXT 45 MINUTES AND TRY TO TURN ME  
9 ON ANY OF THOSE. WE'LL SEE YOU BACK HERE AT 1:00 O'CLOCK.

10 MR. OTTESON: THANK YOU, YOUR HONOR.

11 MS. KEEFE: THANK YOU, YOUR HONOR.

12 (THE LUNCH RECESS WAS TAKEN.)  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
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24  
25

**AFTERNOON PROCEEDINGS**

(PROSPECTIVE JURORS NOT PRESENT.)

THE COURT: ALL RIGHT. LET'S GET STARTED.

BEFORE WE BROKE FOR LUNCH I GAVE YOU ALL MY PRELIMINARY THOUGHTS AS TO WHO WAS REASONABLY EXCUSED ON EITHER HARDSHIP GROUNDS OR CAUSE GROUNDS.

I'M OPEN TO ARGUMENTS REGARDING ANY OF THOSE INDIVIDUALS. DO -- ARE THERE ANY SUCH ARGUMENTS OR SHOULD WE PROCEED IMMEDIATELY TO PEREMPTORIES?

MS. KEEFE: NONE FROM US, YOUR HONOR.

THE COURT: MR. OTTESON?

MR. OTTESON: YES. I DON'T THINK WE WANTED TO CHALLENGE ANY OF THE HARDSHIP JURORS THAT YOU IDENTIFIED.

HOWEVER, WE WOULD LIKE TO CHALLENGE JUROR NUMBER 22 FOR CAUSE.

THE COURT: OKAY. WHY DON'T YOU GO AHEAD? TELL ME WHY.

MR. OTTESON: WELL, BECAUSE WHEN I ASKED HIM IF HE COULD FAIRLY RENDER A VERDICT IN FAVOR OF A PATENT HOLDER, HE DIDN'T SAY YES, HE COULD, IF THE EVIDENCE SUPPORTED IT.

HE EXPRESSED -- AND WE HAD A QUITE A COLLOQUY THERE WHERE HE EXPRESSED CONCERNS ABOUT PATENTS AND THE ASSERTION OF PATENT RIGHTS.

AND SO I THINK HE SHOULD BE DISMISSED FOR CAUSE.

THE COURT: ALL RIGHT. MS. KEEFE?

1 MS. KEEFE: I DISAGREE, YOUR HONOR. I THINK, IN  
2 FACT, HE WAS VERY CAREFULLY ASKED ABOUT PATENTS IN GENERAL. HE  
3 ALWAYS REFERRED TO THE ONLY ISSUES THAT HE HAD WITH RESPECT TO  
4 SOFTWARE PATENTS, THAT HE ACTUALLY UNDERSTOOD PATENTS AND DID,  
5 IN FACT, SEE REASONS FOR PATENTS. IT WAS ONLY SOFTWARE.

6 THERE ARE NOT SOFTWARE PATENTS IN THIS CASE.

7 AND HE -- I DON'T THINK -- I DON'T REMEMBER HEARING IT THE  
8 SAME WAY MR. OTTESON DID THAT HE COULDN'T RENDER A FAIR AND  
9 IMPARTIAL VERDICT.

10 INSTEAD HE SAID HE'D LISTEN AND THAT HE ONLY HAD A PROBLEM  
11 WITH SOFTWARE PATENTS.

12 MR. OTTESON: AND I -- I DON'T THINK THAT'S WHAT HE  
13 SAID. I MEAN, MY RECOLLECTION IS THAT I -- I ASKED HIM IF WE  
14 PRESENTED OUR CASE AND THE EVIDENCE SUPPORTED A FINDING OF  
15 INFRINGEMENT, WHETHER HE COULD BE FAIR AND IMPARTIAL AND RENDER  
16 SUCH A VERDICT AND HE DID MORE THAN EQUIVOCATE. HE INDICATED  
17 THAT HE HAD A PROBLEM WITH IT.

18 THE COURT: ALL RIGHT. WELL, AS TO NUMBER 22, I AM  
19 GOING TO DECLINE THE REQUEST THAT HE BE DISMISSED ON CAUSE  
20 GROUNDS.

21 TO THE EXTENT 22 SURVIVES AND IS SEATED AS A JUROR, I'M  
22 CERTAINLY WILLING TO ENTERTAIN A SPECIFIC ADMONITION OR  
23 INSTRUCTION THAT WILL ADDRESS ANY CONCERNS THAT TPL HAS.

24 MR. OTTESON: THANK YOU, YOUR HONOR.

25 THE COURT: ARE THERE ANY OTHER ISSUES?

1 MR. OTTESON: NO, NOT BEFORE GETTING TO THE  
2 PEREMPTORIES.

3 THE COURT: OKAY. ALL RIGHT.

4 SO THAT THE RECORD IS CLEAR, LET ME JUST REVIEW WITH YOU  
5 WHO IS GOING TO BE DISMISSED FOR EITHER HARDSHIP OR CAUSE  
6 REASONS.

7 JUROR NUMBER 1 IS GOING TO BE DISMISSED FOR HARDSHIP.

8 AND I'M JUST GOING TO CROSS THEIR NAME OUT ON THE SHEET  
9 AND MARK AN H NEXT TO ANY HARDSHIP DISMISSALS AND A C NEXT TO  
10 ANY CAUSE DISMISSALS.

11 JUROR NUMBER 7 ALSO WILL BE DISMISSED FOR UNDUE HARDSHIP;  
12 JUROR NUMBER 12 AND JUROR NUMBER 14 WILL ALSO BE DISMISSED FOR  
13 HARDSHIP; JUROR NUMBER 16 IS DISMISSED FOR CAUSE; JUROR NUMBER  
14 18 IS DISMISSED FOR HARDSHIP; JUROR NUMBER 21 IS DISMISSED FOR  
15 HARDSHIP; JUROR NUMBER 28 IS DISMISSED FOR HARDSHIP; JUROR  
16 NUMBERS 32 AND 34 ARE DISMISSED FOR HARDSHIP; AND JUROR NUMBERS  
17 38, 40, 44, AND 45 ARE ALL DISMISSED FOR UNDUE HARDSHIP.

18 NOW, WITH THAT I'M GOING TO INVITE MR. OTTESON AND  
19 MS. KEEFE TO APPROACH THE PODIUM.

20 MR. OTTESON, YOU WILL HAVE THE FIRST PEREMPTORY TO  
21 EXERCISE. I'D LIKE YOU TO JUST MARK IT ON THE SHEET, IF YOU  
22 COULD, AND PASS IT TO MS. KEEFE.

23 MR. OTTESON: AND WHAT IS THE -- IS IT JUST BACK AND  
24 FORTH? OR DO I JUST -- I DO ONE AND SHE DOES TWO?

25 THE COURT: YOU EACH HAVE THREE CHALLENGES TO

1 EXERCISE. WE'LL BEGIN WITH MR. OTTESON. WE'LL THEN PROCEED TO  
2 MS. KEEFE.

3 IF YOU ELECT TO PASS, THAT COUNTS AGAINST YOUR ALLOCATION  
4 OF THREE.

5 MR. OTTESON: OKAY.

6 (PAUSE IN PROCEEDINGS.)

7 THE COURT: THERE'S A BIT OF A RITUAL I NEED TO  
8 PERFORM, SO BEAR WITH ME.

9 JUROR NUMBER 2 HAS BEEN STRUCK BY TPL.

10 MS. KEEFE: REALLY? I'M STUNNED.

11 (LAUGHTER.)

12 MS. KEEFE: I'M SORRY. I SHOULDN'T HAVE SAID THAT.

13 (PAUSE IN PROCEEDINGS.)

14 THE COURT: JUROR NUMBER 4 HAS BEEN STRUCK BY HTC.

15 (PAUSE IN PROCEEDINGS.)

16 THE COURT: JUROR NUMBER 8 HAS BEEN STRUCK BY TPL.

17 (PAUSE IN PROCEEDINGS.)

18 THE COURT: JUROR NUMBER 9 HAS BEEN STRUCK BY HTC.

19 THAT LEAVES EACH OF YOU WITH ONE FURTHER PEREMPTORY  
20 CHALLENGE.

21 (PAUSE IN PROCEEDINGS.)

22 MR. OTTESON: POINT OF CLARIFICATION, JUDGE.

23 THE COURT: YES.

24 MR. OTTESON: DO I UNDERSTAND CORRECTLY THAT WE CAN  
25 STRIKE ANYBODY WE WANT IN THE POOL FOR OUR LAST PEREMPTORY, OR



1 DOES IT HAVE TO BE SOMEBODY IN THE FIRST NINE?

2 THE COURT: YOU CAN PICK ANY OF THE 45 WHO REMAIN.

3 MR. OTTESON: OKAY.

4 (PAUSE IN PROCEEDINGS.)

5 THE COURT: WITH ITS LAST PEREMPTORY CHALLENGE, TPL  
6 HAS STRUCK JUROR NUMBER 22.

7 MS. KEEFE: THANK YOU.

8 (PAUSE IN PROCEEDINGS.)

9 THE COURT: WITH ITS LAST PEREMPTORY CHALLENGE, HTC  
10 HAS STRUCK JUROR NUMBER 11.

11 ALL RIGHT. SO LET ME SEE IF I HAVE THE BIDDING CORRECT.  
12 THE NINE JURORS WHO WILL SERVE AS THE JURY IN THIS CASE INCLUDE  
13 THE FOLLOWING: JUROR NUMBER 3; JUROR NUMBER 5; JUROR NUMBER 6;  
14 JUROR NUMBER 10; JUROR NUMBER 13; JUROR NUMBER 15; JUROR NUMBER  
15 17; JUROR NUMBER 19; AND JUROR NUMBER 20.

16 IS EVERYBODY IN AGREEMENT?

17 MR. OTTESON: YES, YOUR HONOR.

18 THE COURT: MS. KEEFE?

19 MS. KEEFE: THAT LOOKS LIKE MY MATH, YOUR HONOR.

20 THE COURT: OKAY. ALL RIGHT. WE HAVE OUR JURY.

21 ALL RIGHT. THEN WE WILL BEGIN WITH OPENING STATEMENTS  
22 SHORTLY AFTER 1:30.

23 AT 1:30 EVERYBODY WILL RETURN TO THE COURTROOM. I'LL  
24 EXPLAIN WHO'S BEEN PICKED, WHO HASN'T. I'LL THANK THOSE WHO  
25 WERE NOT SELECTED FOR THEIR TIME AND SERVICE AND THEN, AS I

1 SAID, I WILL GIVE SOME PRELIMINARY INSTRUCTIONS BEFORE TURNING  
2 TO OPENING STATEMENTS.

3 JUST A REMINDER, YOU ALL HAVE ONE HOUR EACH, UP TO AN  
4 HOUR, FOR YOUR OPENINGS.

5 ONE OTHER POINT THAT I'M NOT SURE WE HAD EXPLICITLY TALKED  
6 ABOUT, BUT I WANT TO DO SO NOW.

7 I ALLOW MY JURORS TO ASK QUESTIONS AT THE CONCLUSION OF  
8 THE EXAMINATIONS.

9 NOW, BEFORE THEY ARE ALLOWED TO PUT QUESTIONS TO THE  
10 WITNESS, THEY WILL BE ASKED AND INVITED TO WRITE OUT QUESTIONS  
11 ON A FORM I HAVE.

12 I'LL THEN SHARE THE QUESTIONS WITH COUNSEL AT SIDE-BAR  
13 BEFORE PUTTING THE QUESTION MYSELF TO THE JURY SO THAT YOU ALL  
14 CAN RAISE ANY OBJECTIONS AND MAKE YOUR RECORD.

15 BUT I DO WANT TO ENCOURAGE THEM TO SUBMIT QUESTIONS IF  
16 THEY THINK THERE'S SOMETHING THAT NEEDS TO BE ASKED.

17 ALL RIGHT.

18 MS. KEEFE?

19 MS. KEEFE: JUST A -- "HOUSEKEEPING" IS PROBABLY THE  
20 WRONG WORD, BUT AN IMPORTANT QUESTION ABOUT CONFIDENTIAL  
21 MATERIALS IN OPENINGS.

22 IF THERE IS SOMETHING THAT WE WANT TO REFER TO THAT WOULD  
23 OTHERWISE BE COVERED UNDER THE PROTECTIVE ORDER, GIVEN THAT THE  
24 COURTROOM IS OPEN, HOW WOULD YOUR HONOR PREFER TO DEAL WITH IT?  
25 TO CLOSE IT? TO HAVE US WRITE IT ON A PAD THAT FACES ONLY THE

1 JURY? WE CAN ACCOMMODATE A NUMBER OF DIFFERENT OPTIONS. WE  
2 JUST WONDERED WHAT YOUR HONOR'S PREFERENCE IS.

3 THE COURT: WELL, MY STRONG PREFERENCE IS NOT TO  
4 CLOSE THE COURTROOM IN ANY WAY, SHAPE, OR FORM.

5 IF YOU ALL CAN REACH AN AGREEMENT WHEREBY YOU PROJECT  
6 ONLY TO THE JURY, BUT NOT TO THE MEMBERS OF THE AUDIENCE, I'M  
7 OPEN TO THAT.

8 BUT I DON'T WANT TO HAVE ANY KIND OF INTERRUPTION THAT  
9 REQUIRES THE MEMBERS OF THE PUBLIC TO BE EXCUSED.

10 MR. OTTESON, DO YOU HAVE ANY THOUGHTS ABOUT THAT?

11 MR. OTTESON: WELL, I AGREE WITH YOUR HONOR. I DON'T  
12 THINK THE COURTROOM SHOULD BE CLOSED AT ALL.

13 FOR MY OPENING, I REALLY DON'T THINK IT'S GOING TO GET  
14 INTO ANY SPECIFIC CONFIDENTIAL INFORMATION THAT SHOULD CAUSE  
15 ANY CONCERN AT ALL.

16 SO --

17 MS. KEEFE: I MEAN, WE SEE -- THERE'S ONLY ONE THING  
18 THAT I CAN THINK OF AND IT'S SOMETHING THAT COULD EASILY BE  
19 WRITTEN IF WE PUT A FLIP CHART, FOR EXAMPLE, HERE.

20 THE COURT: COULD YOU DESCRIBE IT FOR ME IN GENERAL  
21 TERMS?

22 MS. KEEFE: POTENTIALLY, AND I'M NOT SURE IT WILL GO  
23 THIS WAY, BUT POTENTIALLY THE DOLLAR AMOUNT ON ONE OF THE  
24 SETTLEMENT AGREEMENTS, OR SORRY, LICENSES.

25 THE COURT: ANY OBJECTION, MR. OTTESON?

1 WE'RE GOING TO GET INTO THIS IN WITNESS EXAMINATION DOWN  
2 THE ROAD.

3 MR. OTTESON: NO.

4 THE COURT: NO OBJECTION?

5 MR. OTTESON: WELL, I DON'T THINK THAT, YOU KNOW, I  
6 DON'T -- IT IS GOING TO BE BROUGHT UP IN WITNESS EXAMINATION  
7 DOWN THE ROAD, SO I DON'T SEE REALLY ANY BENEFIT IN TRYING TO  
8 BE SUPER SECRET ABOUT IT IN A PUBLIC COURTROOM.

9 THE COURT: OKAY. I THINK THAT PERSPECTIVE IS WISE  
10 BECAUSE I'LL TELL YOU RIGHT NOW, IF ONE OF YOU STARTS TO OBJECT  
11 ABOUT PRIVATE INFORMATION BEING SHARED, I'M GOING TO HAVE TO  
12 START CLOSING IT FOR BOTH SIDES AND IT'S GOING TO MAKE THIS  
13 JURY TRIAL GO MUCH LESS SMOOTHLY THAN I WOULD LIKE. SO LET'S  
14 JUST OPEN IT UP.

15 MS. KEEFE: IT'S NOT OUR PRIVATE INFORMATION THAT  
16 WE'RE WORRIED ABOUT HERE. IT'S MAKING SURE THAT WE'RE UNDER  
17 THE PROTECTIVE ORDER BASED ON LICENSES.

18 THE COURT: I APPRECIATE YOU RAISING THE ISSUE. I  
19 THINK YOU'VE HEARD FROM MR. OTTESON. HE HAS NO OBJECTION, SO  
20 WE CAN PROCEED WITHOUT CLOSING THE COURTROOM OR DOING ANYTHING  
21 ELSE.

22 MS. KEEFE: THANK YOU, YOUR HONOR.

23 MR. OTTESON: THANK YOU VERY MUCH.

24 THE COURT: OKAY. SO WE WILL SEE YOU ALL BACK HERE  
25 AT 1:30 AND WE WILL GET STARTED.

1 MR. OTTESON: THANK YOU, YOUR HONOR.

2 MS. KEEFE: THANK YOU, YOUR HONOR.

3 (RECESS FROM 1:20 P.M. UNTIL 1:36 P.M.).

4 (PROSPECTIVE JURORS PRESENT.)

5 THE COURT: LADIES AND GENTLEMEN, I TRUST YOU HAD A  
6 GOOD LUNCH AND A CHANCE TO STEP OUTSIDE IF IT STRUCK YOUR  
7 FANCY.

8 WHILE YOU WERE AWAY AT LUNCH, THE LAWYERS AND I WORKED TO  
9 IDENTIFY THE NINE MEMBERS WHO WILL SERVE AS THE JURY IN THIS  
10 CASE.

11 THE WAY WE'RE GOING TO PROCEED FROM HERE IS AS FOLLOWS:  
12 I'M GOING TO ASK THAT THE FOLKS SITTING IN THE ACTUAL BOX STEP  
13 DOWN AND GATHER OVER HERE SO THAT AS MR. RIVERA CALLS THE NINE  
14 MEMBERS OF THE JURY, THEY WILL TAKE THEIR SEATS ONE BY ONE,  
15 WITH THE FIRST SEVEN TAKING SEATS IN THE FRONT ROW.

16 THANK YOU, IF YOU WOULD. MY APOLOGIES FOR THE TIGHT SPACE  
17 HERE, BUT IT'S THE BEST I CAN DO UNDER THE CIRCUMSTANCES.

18 AND, AGAIN, AS YOUR NAME IS CALLED, IF YOU WOULD ENTER THE  
19 JURY BOX AND TAKE A SEAT, I'D LIKE THE FIRST JUROR TO SIT IN  
20 THE FIRST ROW IN THE FIRST SEAT TO THE FAR LEFT AND WE'LL  
21 PROCEED FROM THERE.

22 MR. RIVERA, YOU MAY CALL THE MEMBERS OF THE JURY.

23 THE CLERK: YES, YOUR HONOR.

24 SANTINO RIVERA, YOU ARE NOW JUROR NUMBER 1. PLEASE TAKE  
25 SEAT NUMBER 1.

1 BRETT IWAHASHI, JUROR NUMBER 2. PLEASE TAKE SEAT NUMBER  
2 2.

3 ALYCIA OSBORNE, JUROR NUMBER 3. PLEASE TAKE SEAT NUMBER  
4 3.

5 DANA NELSON, JUROR NUMBER 4. PLEASE TAKE SEAT NUMBER 4.

6 LINDSAY WAHLER, JUROR NUMBER 5. PLEASE TAKE SEAT NUMBER  
7 5.

8 PATRICE SCOTT, JUROR NUMBER 6. PLEASE TAKE SEAT NUMBER 6.

9 DESIREE CHILDRESS, JUROR NUMBER 7. PLEASE TAKE SEAT  
10 NUMBER 7.

11 JAMES MCDERMOTT, JUROR NUMBER 9 -- EXCUSE ME -- JUROR  
12 NUMBER 8. PLEASE TAKE SEAT NUMBER 8.

13 AND SAM SIN, JUROR NUMBER 9. PLEASE TAKE SEAT NUMBER 9.

14 THE COURT: ALL RIGHT. WITH THAT, LADIES AND  
15 GENTLEMEN, IF THE TWO OF YOU WOULD TAKE YOUR SEAT, I'LL JUST  
16 EXPLAIN TO THOSE WHO WERE NOT SELECTED THAT YOUR SERVICE IS NOW  
17 AT AN END.

18 BEFORE I LET YOU GO, LET ME JUST ADDRESS A COUPLE OF  
19 HOUSEKEEPING MATTERS.

20 FIRST AND FOREMOST, IF YOU HAVE QUESTIONS ABOUT PARKING  
21 AND YOUR REIMBURSEMENT FOR THE DAY, OUR JUROR COORDINATOR CAN  
22 ANSWER THOSE. THOSE QUESTIONS CAN BE ANSWERED ON THE SECOND  
23 FLOOR WHERE YOU CAME IN EARLIER THIS MORNING.

24 THE SECOND AND REALLY THE FINAL POINT I WANT TO MAKE IS  
25 THAT WHILE YOU MAY WONDER IF YOUR TIME HERE WAS WELL SPENT IF

1 YOU WERE NOT SELECTED FOR THE JURY, LET ME ASSURE YOU THAT IT  
2 WAS. THIS IS AN IMPORTANT PART OF THE PROCESS AND I THANK YOU  
3 FOR YOUR CONTRIBUTION TO THIS CASE.

4 YOU'RE EXCUSED. HAVE A WONDERFUL AFTERNOON, AND THANK YOU  
5 FOR YOUR SERVICE.

6 PLEASE STAND.

7 (PROSPECTIVE JURORS EXCUSED, ONLY JURY PANEL REMAINING.)

8 THE COURT: ALL RIGHT. PLEASE BE SEATED.

9 MR. RIVERA, WITH THE JURY NOW SELECTED, I BELIEVE WE CAN  
10 PROCEED TO SWEAR THE JURORS.

11 THE CLERK: YES, YOUR HONOR.

12 THE COURT: COULD YOU PLEASE DO THE HONORS?

13 THE CLERK: PLEASE STAND AND RAISE YOUR RIGHT HAND.

14 (JURY PANEL SWORN.)

15 THE CLERK: THANK YOU.

16 THE COURT: ALL RIGHT. LADIES AND GENTLEMEN, YOU ARE  
17 THE SELECT NINE, AS IT WERE. AS I EXPLAINED BEFORE WE BROKE  
18 FOR LUNCH, WHAT HAPPENS NEXT IS THIS: WE ARE GOING TO PROVIDE  
19 YOU WITH A NUMBER OF INSTRUCTIONS. I AM GOING TO GIVE YOU  
20 THOSE INSTRUCTIONS THAT WILL HOPEFULLY FRAME YOUR APPRECIATION  
21 AND UNDERSTANDING OF WHAT WILL FOLLOW.

22 IMMEDIATELY AFTER I GIVE YOU THE INSTRUCTIONS THAT I'M  
23 ABOUT TO GIVE, THE ATTORNEYS WILL BE INVITED TO GIVE AND  
24 PRESENT OPENING STATEMENTS, A PREVIEW OF THE EVIDENCE TO COME.

25 NOW, I UNDERSTAND COUNSEL, FROM MR. RIVERA, THAT YOU ALL

1 WOULD LIKE A FEW MINUTES TO SET UP SOME SCREENS AND SO FORTH.

2 IS THAT CORRECT?

3 MR. OTTESON: YES, THAT'S CORRECT, YOUR HONOR.

4 THE COURT: MS. KEEFE, ANY OBJECTION TO THAT?

5 MS. KEEFE: NONE WHOSOEVER, YOUR HONOR.

6 THE COURT: ALL RIGHT. WHY DON'T WE DO THIS: LET'S  
7 TAKE A VERY SHORT RECESS TO GIVE THE ATTORNEYS AND THEIR STAFF  
8 AN OPPORTUNITY TO SET UP FOR OPENING STATEMENTS. WHEN WE  
9 RETURN, I WILL GIVE YOU MY PRELIMINARY INSTRUCTIONS AND THEN  
10 WE'LL TURN TO THE STATEMENTS THEMSELVES.

11 MR. RIVERA WILL BE ESCORTING YOU TO THE JURY ROOM. IT'S A  
12 LOCATION YOU SHOULD BECOME VERY COMFORTABLE WITH.

13 PLEASE STAND FOR THE JURY.

14 (JURY OUT AT 1:42 P.M.)

15 (RECESS FROM 1:42 P.M. UNTIL 1:57 P.M.)

16 (JURY OUT AT 1:57 P.M.)

17 THE COURT: ALL RIGHT. COUNSEL, BEFORE WE TURN TO MY  
18 PRELIMINARY INSTRUCTIONS AND OPENING STATEMENTS FROM EACH OF  
19 YOU, ARE THERE ANY OTHER ISSUES WE OUGHT TO ADDRESS OUTSIDE THE  
20 PRESENCE OF THE JURY?

21 MR. OTTESON: I DON'T BELIEVE SO, YOUR HONOR.

22 THE COURT: OKAY. AND BEFORE WE DO ANYTHING ELSE, I  
23 TAKE IT YOU ALL ARE COMFORTABLE AND IN AGREEMENT THAT THAT  
24 SCREEN IS APPROPRIATELY POSITIONED?

25 MR. OTTESON: YEAH. WE DON'T REALLY LIKE IT, JUDGE.



1 WE'D PREFER JUST TO USE THIS ONE, BUT HTC IS PRETTY INSISTENT  
2 THAT WE NEED TO PROTECT SOME THIRD PARTY CONFIDENTIAL  
3 INFORMATION THAT GOES UP ON THE SCREEN, EVEN THOUGH THERE'S  
4 GOING TO BE TESTIMONY ABOUT IT.

5 SO I HAVE SOME QUALMS ABOUT IT JUST BECAUSE IT'S AN AWKWARD  
6 SET UP AND WE WOULD CERTAINLY PREFER TO USE THE MAIN SCREEN,  
7 BUT FOR TODAY IT'S SET UP AND WE SHOULD CERTAINLY DO IT THIS  
8 WAY TODAY.

9 THE COURT: OKAY. MS. KEEFE, DO YOU WANT TO RESPOND?

10 MS. KEEFE: WE'RE TRYING TO BE AS CAUTIOUS AND  
11 CAREFUL AS POSSIBLE TO MAKE SURE THAT THIRD PARTY INFORMATION  
12 IS PROTECTED, AND YET WE RESPECT TO THE COURT'S WISHES TO MAKE  
13 SURE THAT THE COURTROOM REMAINS AS OPEN AS POSSIBLE. SO WE'RE  
14 TRYING TO BE VERY CONSERVATIVE.

15 THE COURT: MAY I ASK, WILL IT BE NECESSARY TO KEEP  
16 THE SCREEN UP FOR THE ENTIRE TRIAL, OR IS IT YOUR INTENTION TO  
17 MOVE IT OR PLACE IT SOMEWHERE ELSE ONCE THE MATERIAL WE'RE  
18 TALKING ABOUT HAS BEEN DISCUSSED?

19 MS. KEEFE: I ACTUALLY THINK THERE WILL BE EASY TIMES  
20 DURING THE REST OF THE TRIAL WHERE WE CAN USE THE MAIN SCREEN  
21 AND THERE WON'T BE A SCREEN THERE AT ALL.

22 THE COURT: ALL RIGHT. I'LL STOP YOU THERE AND SAY  
23 IF THIS IS WHAT'S NECESSARY TO BALANCE THESE INTERESTS, I'M  
24 CERTAINLY HAPPY TO LET IT BE USED.

25 LET ME JUST MAKE THE REQUEST THAT -- AND I'M GOING TO

1 LOOK TO YOU ALL TO TAKE THE LEAD ON THIS -- WHENEVER AND  
2 HOWEVER OFTEN YOU CAN GET THAT OUT OF THERE AND USE THIS  
3 SCREEN, I'D LIKE TO DO IT SO THE PEOPLE IN THE AUDIENCE CAN  
4 ALSO UNDERSTAND WHAT'S GOING ON.

5 MS. KEEFE: ABSOLUTELY, YOUR HONOR.

6 (DISCUSSION OFF THE RECORD BETWEEN THE COURT AND THE  
7 CLERK.)

8 THE COURT: MR. RIVERA REMINDS ME, THIS SCREEN IS  
9 ACTUALLY BROKEN, ISN'T IT, SIR?

10 THE CLERK: YES, YOUR HONOR.

11 MS. KEEFE: WE CAN CERTAINLY BRING THAT SCREEN OVER  
12 HERE, YOUR HONOR. WE HAVE NO PROBLEM WITH THAT.

13 THE COURT: ALL RIGHT. WITH THAT, MR. RIVERA, WOULD  
14 YOU PLEASE BRING THE JURY IN?

15 (JURY IN AT 1:59 P.M.)

16 THE COURT: MEMBERS OF THE JURY, WHEN YOU TOOK THE  
17 OATH JUST A FEW MOMENTS AGO, YOU BECAME PARTNERS WITH THIS  
18 COURT IN THIS TRIAL, AND AS YOUR PARTNER, I HAVE MANY  
19 RESPONSIBILITIES TO YOU. AMONG THEM IS PROVIDING YOU WITH THE  
20 INSTRUCTIONS THAT SHOULD GUIDE YOUR APPRECIATION OF THE  
21 EVIDENCE IN THIS CASE, AND ULTIMATELY YOUR DELIBERATIONS.

22 AND SO WITH THAT, I'D LIKE TO GIVE YOU SOME PRELIMINARY  
23 INSTRUCTIONS THAT WILL HOPEFULLY ASSIST YOU IN PROCESSING AND  
24 UNDERSTANDING ALL THAT WILL FOLLOW BETWEEN NOW AND THE END OF  
25 THE TRIAL.

1 UNDERSTAND THAT AT THE END OF THE TRIAL, I WILL GIVE YOU  
2 FINAL INSTRUCTIONS WHICH WILL FILL OUT THE LAW THAT YOU ARE TO  
3 APPLY AND THE STANDARDS THAT WILL GOVERN.

4 THIS CASE INVOLVES A DISPUTE RELATING TO A UNITED STATES  
5 PATENT. BEFORE SUMMARIZING THE POSITIONS OF THE PARTIES AND  
6 THE LEGAL ISSUES INVOLVED IN THIS DISPUTE, LET ME TAKE A MOMENT  
7 TO EXPLAIN WHAT A PATENT IS AND HOW ONE IS OBTAINED.

8 PATENTS ARE GRANTED BY THE UNITED STATES PATENT AND  
9 TRADEMARK OFFICE (SOMETIMES CALLED "THE PTO"). THE PROCESS OF  
10 OBTAINING A PATENT IS CALLED PATENT PROSECUTION.

11 A VALID UNITED STATES PATENT GIVES A PATENT OWNER THE  
12 RIGHT TO PREVENT OTHERS FROM MAKING, USING, OFFERING TO SELL,  
13 OR SELLING THE PATENTED INVENTION WITHIN THE UNITED STATES, OR  
14 FROM IMPORTING IT INTO THE UNITED STATES, DURING THE TERM OF  
15 THE PATENT WITHOUT THE PATENT HOLDER'S PERMISSION.

16 A VIOLATION OF THE PATENT OWNER'S RIGHT IS CALLED  
17 INFRINGEMENT. A PATENT OWNER MAY TRY TO ENFORCE THE PATENT  
18 AGAINST PERSONS BELIEVED TO BE INFRINGERS BY A LAWSUIT FILED IN  
19 FEDERAL COURT.

20 TO OBTAIN A PATENT, ONE MUST FILE AN APPLICATION WITH THE  
21 PTO. THE PTO IS AN AGENCY OF THE FEDERAL GOVERNMENT AND  
22 EMPLOYS TRAINED EXAMINERS WHO REVIEW APPLICATIONS FOR PATENTS.  
23 THE APPLICATION INCLUDES WHAT IS CALLED A "SPECIFICATION,"  
24 WHICH MUST CONTAIN A WRITTEN DESCRIPTION OF THE CLAIMED  
25 INVENTION TELLING WHAT THE INVENTION IS, HOW IT WORKS, HOW TO

1 MAKE IT, AND HOW TO USE IT SO OTHERS SKILLED THE FIELD WILL  
2 KNOW HOW TO MAKE OR USE IT.

3 THE SPECIFICATION CONCLUDES WITH ONE OR MORE NUMBERED  
4 SENTENCES. THESE ARE THE PATENT "CLAIMS." WHEN THE PATENT IS  
5 EVENTUALLY GRANTED BY THE PTO, THE CLAIMS DEFINE THE BOUNDARIES  
6 OF ITS PROTECTION AND GIVE NOTICE TO THE PUBLIC OF THOSE  
7 BOUNDARIES.

8 AFTER THE APPLICANT FILES THE APPLICATION, A PTO PATENT  
9 EXAMINER REVIEWS THE PATENT APPLICATION TO DETERMINE WHETHER  
10 THE CLAIMS ARE PATENTABLE AND WHETHER THE SPECIFICATION  
11 ADEQUATELY DESCRIBES THE INVENTION CLAIMED.

12 IN EXAMINING A PATENT APPLICATION, THE PATENT EXAMINER  
13 REVIEWS RECORDS AVAILABLE TO THE PTO FOR WHAT IS REFERRED TO AS  
14 "PRIOR ART."

15 THE EXAMINER ALSO WILL REVIEW PRIOR ART IF IT IS SUBMITTED  
16 TO THE PTO BY THE APPLICANT.

17 PRIOR ART IS DEFINED BY LAW, AND I WILL GIVE YOU SPECIFIC  
18 INSTRUCTIONS AS TO WHAT CONSTITUTES PRIOR ART AT A LATER TIME.

19 HOWEVER, IN GENERAL, PRIOR ART INCLUDES THINGS THAT  
20 EXISTED BEFORE THE CLAIMED INVENTION, THAT WERE PUBLICLY KNOWN,  
21 OR USED IN A PUBLICLY ACCESSIBLE WAY IN THIS COUNTRY, OR THAT  
22 WERE PATENTED OR DESCRIBED IN A PUBLICATION IN ANY COUNTRY.

23 THE EXAMINER CONSIDERS, AMONG OTHER THINGS, WHETHER EACH  
24 CLAIM DEFINES AN INVENTION THAT IS NEW, USEFUL, AND NOT OBVIOUS  
25 IN VIEW OF THE PRIOR ART. A PATENT LISTS THE PRIOR ART THAT

1 THE EXAMINER CONSIDERED; THIS LIST IS CALLED THE "CITED  
2 REFERENCES."

3 AFTER THE PRIOR ART SEARCH AND EXAMINATION OF THE  
4 APPLICATION, THE PATENT EXAMINER THEN INFORMS THE APPLICANT IN  
5 WRITING WHAT THE EXAMINER HAS FOUND AND WHETHER ANY CLAIM IS  
6 PATENTABLE, AND THUS WILL BE "ALLOWED." THIS WRITING FROM THE  
7 PATENT OFFICE IS CALLED AN "OFFICE ACTION."

8 IF THE EXAMINER REJECTS THE CLAIMS, THE APPLICANT THEN  
9 RESPONDS AND SOMETIMES CHANGES THE CLAIMS OR SUBMITS NEW  
10 CLAIMS. THIS PROCESS, WHICH TAKES PLACE ONLY BETWEEN THE  
11 EXAMINER AND THE PATENT APPLICANT, MAY GO BACK AND FORTH FOR  
12 SOME TIME UNTIL THE EXAMINER IS SATISFIED THAT THE APPLICATION  
13 AND CLAIMS MEET THE REQUIREMENTS FOR A PATENT.

14 THE PAPERS GENERATED DURING THIS TIME OF COMMUNICATING  
15 BACK AND FORTH BETWEEN THE PATENT EXAMINER AND THE APPLICANT  
16 MAKE UP WHAT IS CALLED THE "PROSECUTION HISTORY."

17 ALL OF THIS MATERIAL BECOMES AVAILABLE TO THE PUBLIC NO  
18 LATER THAN THE DATE WHEN THE PATENT ISSUES.

19 THE FACT THAT THE PATENT -- I'M SORRY.

20 THE FACT THAT THE PTO GRANTS A PATENT DOES NOT NECESSARILY  
21 MEAN THAT ANY INVENTION CLAIMED IN THE PATENT, IN FACT,  
22 DESERVES THE PROTECTION OF A PATENT. FOR EXAMPLE, THE PTO MAY  
23 NOT HAVE HAD AVAILABLE TO IT ALL THE INFORMATION THAT WILL BE  
24 PRESENTED TO YOU.

25 A PERSON ACCUSED OF INFRINGEMENT HAS THE RIGHT TO ARGUE

1 HERE IN FEDERAL COURT THAT A CLAIMED INVENTION IN A PATENT IS  
2 INVALID BECAUSE IT DOES NOT MEET THE REQUIREMENTS FOR A PATENT.

3 THIS CASE INVOLVES ONE UNITED STATES PATENT, THE "ASSERTED  
4 PATENT," OBTAINED BY CHARLES H. MOORE AND RUSSELL H. FISH, III,  
5 AND TRANSFERRED BY MR. MOORE TO TPL AND MR. FISH TO PATRIOT.

6 THE UNITED STATES PATENT NUMBER 5,809,336 LISTS MR. MOORE  
7 AND MR. FISH AS THE INVENTORS. FOR CONVENIENCE, THE PARTIES  
8 AND I WILL REFER TO U.S. PATENT NUMBER 5,809,336 AS THE '336  
9 PATENT, 336 BEING THE LAST NUMBERS OF THE PATENT NUMBER.

10 THE PLAINTIFFS IN THIS CASE ARE HTC CORPORATION AND HTC  
11 AMERICA. FOR CONVENIENCE, THE PARTIES AND I WILL OFTEN REFER  
12 TO PLAINTIFFS AS HTC.

13 THE DEFENDANTS IN THIS CASE ARE TECHNOLOGY PROPERTIES  
14 LIMITED, ALLIACENSE LIMITED, AND PATRIOT SCIENTIFIC  
15 CORPORATION. FOR CONVENIENCE, THE PARTIES AND I WILL REFER TO  
16 DEFENDANTS AS TPL AND PATRIOT.

17 TO HELP YOU FOLLOW THE EVIDENCE, I WILL AGAIN GIVE YOU A  
18 SUMMARY OF THE POSITIONS OF THE PARTIES.

19 HTC FILED SUIT IN THIS COURT SEEKING A DECLARATION THAT NO  
20 CLAIM OF THE '336 PATENT IS INFRINGED BY HTC.

21 TPL FILED A COUNTER-COMPLAINT ALLEGING THAT HTC INFRINGES  
22 THE '336 PATENT BY MAKING, IMPORTING, USING, SELLING, AND  
23 OFFERING FOR SALE PRODUCTS THAT TPL ARGUES ARE COVERED BY  
24 CLAIMS 6, 7, 9, 13, 14, AND 15 OF THE '336 PATENT.

25 TPL ALSO ARGUES THAT HTC ACTIVELY INDUCED INFRINGEMENT OF

1       THESE CLAIMS OF THE '336 PATENT. TPL IS SEEKING MONEY DAMAGES.

2               YOUR JOB WILL BE TO DECIDE WHETHER CLAIMS 6, 7, 9, 13, 14,  
3       AND 15 OF THE '336 PATENT HAVE BEEN INFRINGED.

4               IF YOU DECIDE THAT ANY CLAIM OF THE '336 PATENT HAS BEEN  
5       INFRINGED BY HTC, YOU WILL THEN NEED TO DECIDE ANY MONEY  
6       DAMAGES TO BE AWARDED TO TPL AND PATRIOT TO COMPENSATE IT FOR  
7       THE INFRINGEMENT.

8               YOU WILL ALSO NEED TO MAKE A FINDING AS TO WHETHER THE  
9       INFRINGEMENT WAS WILLFUL. IF YOU DECIDE THAT ANY INFRINGEMENT  
10      WAS WILLFUL, THAT DECISION SHOULD NOT AFFECT ANY DAMAGE AWARD  
11      YOU GIVE. I WILL TAKE WILLFULNESS INTO ACCOUNT LATER.

12              YOU MAY HEAR EVIDENCE THAT HTC HAS ITS OWN PATENT OR  
13      PATENTS OR THAT HTC IMPROVED ON THE '336 PATENT. WHILE THIS  
14      EVIDENCE IS RELEVANT TO SOME ISSUES YOU WILL BE ASKED TO  
15      DECIDE, A PARTY CAN STILL INFRINGE EVEN IF IT HAS ITS OWN  
16      PATENTS IN THE SAME AREA.

17              YOU WILL BE INSTRUCTED AFTER TRIAL AS TO WHAT, IF ANY,  
18      RELEVANCE THESE FACTS HAVE TO THE PARTICULAR ISSUES IN THIS  
19      CASE.

20              MEANWHILE, PLEASE KEEP AN OPEN MIND.

21              BEFORE YOU DECIDE WHETHER HTC HAS INFRINGED THE CLAIMS OF  
22      THE PATENT, YOU WILL NEED TO UNDERSTAND THE PATENT CLAIMS. AS  
23      I MENTIONED, THE PATENT CLAIMS ARE NUMBERED SENTENCES AT THE  
24      END OF THE PATENT THAT DESCRIBE THE BOUNDARIES OF THE PATENT'S  
25      PROTECTION. IT IS MY JOB AS JUDGE TO EXPLAIN TO YOU THE

1 MEANING OF ANY LANGUAGE IN THE CLAIMS THAT NEEDS  
2 INTERPRETATION.

3 I HAVE ALREADY DETERMINED THE MEANING OF CERTAIN TERMS OF  
4 THE CLAIMS OF THE '336 PATENT. YOU WILL BE GIVEN A DOCUMENT  
5 REFLECTING THOSE MEANINGS. YOU ARE TO APPLY MY DEFINITIONS OF  
6 THESE TERMS THROUGHOUT THIS CASE.

7 HOWEVER, MY INTERPRETATION OF THE LANGUAGE OF THE CLAIMS  
8 SHOULD NOT BE TAKEN AS AN INDICATION THAT I HAVE A VIEW  
9 REGARDING ISSUES SUCH AS INFRINGEMENT. THOSE ISSUES ARE YOURS  
10 TO DECIDE.

11 I WILL PROVIDE YOU WITH MORE DETAILED INSTRUCTIONS ON THE  
12 MEANING OF THE CLAIMS BEFORE YOU RETIRE TO DELIBERATE YOUR  
13 VERDICT.

14 THE TRIAL WILL NOW BEGIN. FIRST, EACH SIDE MAY MAKE AN  
15 OPENING STATEMENT. AN OPENING STATEMENT IS NOT EVIDENCE. IT  
16 IS SIMPLY AN OUTLINE TO HELP YOU UNDERSTAND WHAT THAT PARTY  
17 EXPECTS THE EVIDENCE WILL SHOW.

18 THE PRESENTATION OF EVIDENCE WILL THEN BEGIN. WITNESSES  
19 WILL TAKE THE WITNESS STAND AND THE DOCUMENTS WILL BE OFFERED  
20 AND ADMITTED INTO EVIDENCE.

21 THERE ARE TWO STANDARDS OF PROOF THAT YOU WILL APPLY TO  
22 THE EVIDENCE, DEPENDING ON THE ISSUE YOU ARE DECIDING. ON SOME  
23 ISSUES, YOU MUST DECIDE WHETHER SOMETHING IS MORE LIKELY TRUE  
24 THAN NOT. ON OTHER ISSUES YOU MUST USE A HIGHER STANDARD AND  
25 DECIDE WHETHER IT IS HIGHLY PROBABLE THAT SOMETHING IS TRUE.



1 TPL WILL PRESENT THEIR EVIDENCE ON THEIR CONTENTIONS THAT  
2 SOME OF THE CLAIMS OF THE '336 PATENT HAVE BEEN INFRINGED BY  
3 HTC AND THAT THE INFRINGEMENT HAS BEEN WILLFUL. THESE  
4 WITNESSES WILL BE QUESTIONED BY TPL AND PATRIOT'S COUNSEL IN  
5 WHAT IS CALLED DIRECT EXAMINATION.

6 AFTER THE DIRECT EXAMINATION OF A WITNESS IS COMPLETED,  
7 THE OPPOSING SIDE HAS AN OPPORTUNITY TO CROSS-EXAMINE THE  
8 WITNESS.

9 TO PROVE INFRINGEMENT OF ANY CLAIM, TPL AND PATRIOT MUST  
10 PERSUADE YOU THAT IT IS MORE LIKELY THAN NOT THAT HTC INFRINGED  
11 THAT CLAIM.

12 TO PERSUADE YOU THAT ANY INFRINGEMENT WAS WILLFUL, TPL AND  
13 PATRIOT MUST PROVE THAT IT IS HIGHLY PROBABLE THAT THE  
14 INFRINGEMENT WAS WILLFUL.

15 AFTER TPL HAVE PRESENTED THEIR WITNESSES, HTC WILL CALL  
16 THEIR WITNESSES, WHO WILL ALSO BE EXAMINED AND CROSS-EXAMINED.

17 HTC WILL PUT ON EVIDENCE RESPONDING TO TPL AND PATRIOT'S  
18 INFRINGEMENT AND WILLFULNESS CONTENTIONS.

19 TPL AND PATRIOT WILL THEN RETURN TO PUT ON WHAT IS  
20 REFERRED TO AS "REBUTTAL" EVIDENCE TO ANY EVIDENCE OFFERED BY  
21 HTC OF NON-INFRINGEMENT OR LACK OF WILLFULNESS.

22 BECAUSE THE EVIDENCE IS INTRODUCED PIECEMEAL, YOU NEED TO  
23 KEEP AN OPEN MIND AS THE EVIDENCE COMES IN AND WAIT FOR ALL THE  
24 EVIDENCE BEFORE YOU MAKE ANY DECISIONS. IN OTHER WORDS, YOU  
25 SHOULD KEEP AN OPEN MIND THROUGHOUT THE ENTIRE TRIAL.

1 THE PARTIES MAY PRESENT THE TESTIMONY OF A WITNESS BY  
2 READING FROM HIS OR HER DEPOSITION TRANSCRIPT OR PLAYING A  
3 VIDEOTAPE OF THE WITNESS'S DEPOSITION TESTIMONY. A DEPOSITION  
4 IS THE SWORN TESTIMONY OF A WITNESS TAKEN BEFORE TRIAL AND IS  
5 ENTITLED TO THE SAME CONSIDERATION AS IF THE WITNESS HAD  
6 TESTIFIED AT TRIAL.

7 AFTER THE EVIDENCE HAS BEEN PRESENTED, I WILL GIVE YOU  
8 FINAL INSTRUCTIONS ON THE LAW THAT APPLIES TO THE CASE AND THE  
9 ATTORNEYS WILL MAKE CLOSING ARGUMENTS. CLOSING ARGUMENTS ARE  
10 NOT EVIDENCE.

11 AFTER THE INSTRUCTIONS AND CLOSING ARGUMENTS, YOU WILL  
12 THEN DECIDE THIS CASE.

13 WITH THAT, I WOULD LIKE TO TURN TO THE ATTORNEYS AND  
14 INVITE EACH SIDE TO PRESENT THEIR OPENING STATEMENTS.

15 MR. OTTESON, YOU HAVE THE FLOOR.

16 MR. OTTESON: THANK YOU, YOUR HONOR.

17 **(MR. OTTESON GAVE HIS OPENING STATEMENT ON BEHALF OF THE**  
18 **DEFENDANTS.)**

19 MR. OTTESON: LADIES AND GENTLEMEN, FIRST OF ALL, I  
20 WANT TO THANK YOU FOR YOUR SERVICE TODAY. IT IS VERY IMPORTANT  
21 TO US AS THE PARTIES THAT WE FEEL LIKE WE HAVE A FAIR AND  
22 IMPARTIAL JURY, AND SO I REALLY APPRECIATE YOU TAKING THE TIME  
23 AND PUTTING IN YOUR SERVICE IN THIS VERY IMPORTANT TASK THAT  
24 REALLY MEANS A LOT TO BOTH MY CLIENTS AND, I KNOW, HTC.

25 MY NAME IS JIM OTTESON, AND I WILL BE GIVING THE OPENING

1 STATEMENT FOR THE PATENT HOLDERS IN THIS CASE, PATRIOT  
2 SCIENTIFIC CORPORATION, TECHNOLOGY PROPERTIES LIMITED, OR TPL,  
3 AND ALLIACENSE.

4 NOW, AS JUDGE GREWAL HAS EXPLAINED TO YOU, THIS IS A  
5 PATENT INFRINGEMENT CASE. MY CLIENTS HAVE ACCUSED HTC OF  
6 INFRINGING MY CLIENTS' PATENT, THE '336 PATENT, AS YOU HEARD.

7 NOW, THE '336 PATENT COVERS TECHNOLOGY RELATING TO  
8 COMPUTER CHIPS, AND SPECIFICALLY, MICROPROCESSOR CHIPS.

9 NOW, YOU ALL KNOW THAT WE LIVE IN A WORLD OF RAPIDLY  
10 EVOLVING TECHNOLOGY. 25 YEARS AGO, ALMOST NOBODY EVEN USED  
11 E-MAIL. 20 YEARS AGO, FEW PEOPLE HAD HEARD OF THE INTERNET.  
12 AND 15 TO 20 YEARS AGO, MOST PEOPLE DIDN'T OWN A CELL PHONE,  
13 AND IF THEY DID, IT WAS SO BIG AND HEAVY YOU PROBABLY COULDN'T  
14 PUT IT IN YOUR POCKET OR IT WEIGHED DOWN YOUR PURSE LIKE A BOAT  
15 ANCHOR.

16 TEN YEARS AGO, ALMOST NO ONE OWNED WHAT WE WOULD RECOGNIZE  
17 TODAY AS A SMARTPHONE, AND APPLE DIDN'T EVEN INTRODUCE THE  
18 FIRST IPHONE UNTIL 2007.

19 NOW, AS TECHNOLOGY MOVES ON, WE TEND TO FORGET ABOUT THE  
20 IMPORTANT INVENTIONS AND INNOVATIONS OF THE PAST BECAUSE WE  
21 COME TO TAKE THEM FOR GRANTED.

22 BUT MAKE NO MISTAKE. WE WOULD NOT BE HERE TODAY WITH THE  
23 TECHNOLOGY WE HAVE WITHOUT STANDING ON THE SHOULDERS OF THE  
24 GREAT INNOVATORS WHO WENT BEFORE. WE HAVE THEM TO THANK FOR  
25 THEIR GROUNDBREAKING INNOVATIONS WHICH HAVE PROVIDED THE

1 FOUNDATION FOR TODAY'S TECHNOLOGY WHICH WE ALL NOW ENJOY AND  
2 TAKE FOR GRANTED.

3 NOW, TODAY YOU ARE GOING TO HEAR FROM A GREAT AMERICAN  
4 INNOVATOR, CHUCK MOORE. CHUCK IS WITH US TODAY, AND HE -- HE  
5 IS TRULY A SILICON VALLEY PIONEER. HE'S A MAN WHO CREATED HIS  
6 OWN COMPUTER PROGRAMMING LANGUAGE CALLED FORTH WHICH HAS BEEN  
7 USED TO PROGRAM COMPUTERS ON MULTIPLE NASA SPACE MISSIONS.

8 WHY? BECAUSE IT'S AN AMAZINGLY COMPACT, FAST, AND  
9 EFFICIENT COMPUTER LANGUAGE.

10 CHUCK HAS ALSO DESIGNED MULTIPLE MICROPROCESSOR CHIPS  
11 WHICH HE'LL TELL YOU ABOUT, INCLUDING ONE HE'S WORKING ON TODAY  
12 CALLED THE GREENARRAYS 144 CHIP WHICH ACTUALLY HAS 144  
13 MINICOMPUTERS ON THE SAME CHIP. IT'S DESIGNED FOR HIGH SPEED,  
14 HIGH PERFORMANCE, BUT AT THE SAME TIME, WITH VERY LOW ENERGY  
15 USE.

16 NOW, IN 1989, CHUCK, ALONG WITH HIS CO-INVENTOR,  
17 RUSSELL FISH, CREATED A GROUNDBREAKING MICROPROCESSOR CALLED  
18 SHBOOM.

19 NOW, SHBOOM WAS A COMMERCIAL FAILURE, BUT TO A LARGE  
20 EXTENT, THAT WAS BECAUSE IT WAS A CHIP THAT WAS WAY AHEAD OF  
21 ITS TIME.

22 AND ONE OF THE MOST IMPORTANT THINGS ABOUT CHUCK MOORE'S  
23 SHBOOM CHIP WAS ITS SPEED. CHUCK DESIGNED THE SHBOOM CHIP WITH  
24 AN AMAZING NEW CLOCK SYSTEM THAT ALLOWED IT TO RUN AT 70  
25 MEGAHERTZ.

1           NOW, I DON'T KNOW IF ANY OF YOU KNOW ABOUT COMPUTER  
2           SPEEDS, BUT IN 1989, THAT WAS REALLY FAST. AT THAT TIME, MOST  
3           MICROPROCESSOR CHIPS RAN AT ABOUT 5 TO 10 MEGAHERTZ, EVEN THE  
4           FAST ONES, AND EVEN THE INTEL 486 PROCESSOR FOR LAPTOP AND  
5           DESKTOP COMPUTERS WASN'T EVEN COMMERCIALY AVAILABLE UNTIL THE  
6           END OF 1989, AND IT ONLY RAN AT 25 TO 33 MEGAHERTZ, WHICH WAS  
7           LESS THAN HALF AS FAST AS CHUCK'S SHBOOM CHIP.

8           SO FAST FORWARD TO TODAY. TODAY EVERY HIGH SPEED  
9           MICROPROCESSOR IN THE WORLD USES CHUCK MOORE'S TRAIL BLAZING  
10          CHOCKING SYSTEM.

11          WHY? BECAUSE IT'S IMPOSSIBLE TO MAKE A SMARTPHONE THAT  
12          CAN SURF THE INTERNET, RECEIVE AND RESPOND TO E-MAIL, TAKE  
13          PHOTOGRAPHS, TEXT THEM TO YOUR FRIENDS AND RELATIVES WITHOUT A  
14          REALLY FAST MICROPROCESSOR, AND IT'S IMPOSSIBLE TO GET A REALLY  
15          FAST HIGH PERFORMANCE MICROPROCESSOR WITHOUT USING THE CLOCKING  
16          SYSTEM THAT CHUCK MOORE INVENTED IN 1989. WE'RE GOING TO TALK  
17          ABOUT THAT IN THIS TRIAL.

18          NOW, WHILE IT'S NATURAL FOR PEOPLE TO FORGET ABOUT OLDER  
19          INVENTIONS AND KIND OF TAKE THEM FOR GRANTED, THERE ARE SOME  
20          MANUFACTURING COMPANIES THAT WOULD ACTUALLY LIKE TO FORGET  
21          ABOUT WHAT WAS DONE BEFORE, LIKE HTC.

22          THEY WANT TO TELL YOU THAT THE WORLD HAS PASSED  
23          CHUCK MOORE BY AND THAT HIS INVENTION IS NOW AN OBSOLETE  
24          CLOCKING SYSTEM THAT BEARS NO RELATIONSHIP TO HOW HTC CLOCKS  
25          ITS SMARTPHONES.

1 BUT AS THE JURY HERE IN THIS CASE, YOU'VE GOT TO ASK  
2 YOURSELVES A QUESTION. IF THE WORLD HAS PASSED CHUCK MOORE BY  
3 AND HIS INVENTION IS NOW IRRELEVANT, WHY HAVE SO MANY LARGE  
4 GLOBAL ELECTRONICS COMPANIES ALREADY PURCHASED A LICENSE FOR  
5 PERMISSION TO PRACTICE CHUCK MOORE'S MICROPROCESSOR PATENTS,  
6 INCLUDING THE '336 PATENT? COMPANIES LIKE INTEL, SONY, NOKIA,  
7 H-P, APPLE, PANASONIC, RIM/BLACKBERRY, AND MANY, MANY OTHERS  
8 HAVE ALREADY PURCHASED LICENSES TO THE MOORE MICROPROCESSOR  
9 PORTFOLIO, WHICH INCLUDES THE '336 PATENT.

10 IN OTHER WORDS -- OH, AND THIS IS ONLY A PARTIAL LIST. I  
11 SHOULD POINT OUT, THERE ARE OVER 100 COMPANIES THAT HAVE PAID  
12 FOR A LICENSE TO PRACTICE CHUCK MOORE'S PATENTS, INCLUDING THE  
13 '336. IN OTHER WORDS, THESE COMPANIES HAVE ALREADY  
14 ACKNOWLEDGED THE GENIUS OF CHUCK MOORE'S INVENTION.

15 LET'S BACK UP LITTLE BIT BECAUSE I THINK IT'S VERY  
16 IMPORTANT FOR YOU TO UNDERSTAND A LITTLE BIT ABOUT THE  
17 TECHNOLOGY IN THIS CASE SO THAT YOU CAN UNDERSTAND  
18 CHUCK MOORE'S INVENTION AND WHY HTC INFRINGES IT.

19 SO IF I COULD, I'M GOING TO TRY TO HELP YOU UNDERSTAND THE  
20 TECHNOLOGY.

21 SO LET'S START OUT WITH SOMETHING BASIC, OR RELATIVELY  
22 BASIC. WHAT IS A MICROPROCESSOR?

23 AND I THINK IT'S EASIEST TO UNDERSTAND THIS IF WE PUT IT  
24 IN THE CONTEXT OF SOMETHING THAT'S FAMILIAR TO US, WHICH IS A  
25 MOBILE PHONE, WHICH I THINK JUST ABOUT ALL OF US HAVE, NOT

1 EVERYBODY, BUT MOST PEOPLE DO.

2 NOW, HERE WE HAVE UP ON THE SCREEN A MOBILE PHONE FROM ONE  
3 OF THE COMPANIES THAT HAS PAID FOR A LICENSE TO USE THE  
4 TECHNOLOGY THAT CHUCK MOORE INVENTED. THIS, OF COURSE, IS AN  
5 APPLE IPHONE.

6 NOW, IF WE LOOK INSIDE THIS OR ANY OTHER SMARTPHONE, WE'RE  
7 GOING TO SEE SEVERAL COMPONENTS, AND I WANT TO FOCUS ON A FEW  
8 OF THEM.

9 AS YOU MAY KNOW, IF YOU OPEN UP A MOBILE PHONE OR MOST  
10 OTHER ELECTRONIC PRODUCTS, YOU USUALLY ARE GOING TO SEE A GREEN  
11 BOARD WITH A BUNCH OF CHIPS AND OTHER THINGS MOUNTED TO IT. WE  
12 CALL THAT GREEN BOARD A PRINTED CIRCUIT BOARD.

13 AND IN THIS EXAMPLE, THE BIG COMPUTER CHIP IN THE MIDDLE  
14 IS LABELED PROCESSOR, AND THAT'S THE MICROPROCESSOR. IT'S  
15 BASICALLY A MINI COMPUTER THAT FITS ALL ON A SINGLE SILICON  
16 CHIP.

17 AND LIKE I TOLD YOU BEFORE, CHUCK'S ACTUALLY NOW WORKING  
18 ON A MICROPROCESSOR THAT HAS 144 MINI COMPUTERS ON THE SAME  
19 CHIP.

20 BUT BASICALLY WHAT DOES A MICROPROCESSOR DO? WELL, IT  
21 DOES ALL OF THE WORK AND COMPUTATIONS AND MOVING OF DATA AND  
22 THINGS THAT YOUR PHONE NEEDS TO BE ABLE TO DO TO DO WHAT YOU  
23 WANT TO DO WITH YOUR PHONE: TEXT MESSAGING; SEARCHING THE  
24 INTERNET; TAKING PHOTOS AND E-MAILING THEM TO YOUR FAMILY;  
25 WATCHING VIDEOS; EVEN MAKING PHONE CALLS. ALL OF THAT IS

1       MANAGED AND CONTROLLED BY THE MICROPROCESSOR. IT IS THE BRAIN  
2       OF YOUR PHONE. IT IS THE MOST IMPORTANT PART.

3               NOW, AS YOU CAN SEE HERE, THERE ARE SOME OTHER PARTS OF A  
4       MOBILE PHONE, TOO, LIKE MEMORY, THE CAMERA, AND SOME OTHER  
5       THINGS THAT WE SEE HERE ON THE PRINTED CIRCUIT BOARD.

6               AND IT'S IMPORTANT TO NOTICE THAT ALL OF THESE THINGS ARE  
7       ACTUALLY CONNECTED TO THE MICROPROCESSOR.

8               NOW, WHY IS THAT? THE REASON THOSE OTHER COMPONENTS ARE  
9       CONNECTED TO THE MICROPROCESSOR IS THAT THE MICROPROCESSOR DOES  
10      THE PROCESSING AND THE COMPUTATIONS AND THE MANIPULATION OF  
11      DATA SO THAT YOU CAN DO THE THINGS THAT YOU WANT TO DO.

12              AND SO, FOR EXAMPLE, IF YOU TAKE A PICTURE AND YOU WANT TO  
13      DO SOMETHING WITH IT, THAT FILE GETS SENT FROM THE CAMERA TO  
14      THE MICROPROCESSOR. THAT WOULD BE CALLED AN INPUT. THAT'S AN  
15      INPUT INTO THE MICROPROCESSOR.

16              THEN IF THE MICROPROCESSOR DOES SOMETHING WITH IT, LIKE  
17      YOU WANT TO ADJUST THE PHOTO OR ATTACH IT TO AN E-MAIL OR  
18      WHATEVER AND IT SENDS IT OUT, THAT IS CALLED AN OUTPUT FROM THE  
19      MICROPROCESSOR.

20              SO YOU'RE GOING TO HEAR A LOT IN THIS CASE ABOUT THE FACT  
21      THAT A MICROPROCESSOR HAS AN INPUT/OUTPUT INTERFACE, OR AN I/O  
22      INTERFACE.

23              AND THAT'S ACTUALLY -- IF WE CAN GO TO THE NEXT SLIDE --  
24      AN INPUT/OUTPUT INTERFACE IS ON THE CHIP, SO IT'S ACTUALLY PART  
25      OF THE MICROPROCESSOR, AND I'M NOT A CHIP ENGINEER, SO I DON'T



1        REALLY KNOW EXACTLY WHERE IT WOULD BE, BUT LIKELY IT'S SOME  
2        CIRCUITRY NEAR THE EDGE OF THE CHIP, WHICH THE PURPOSE OF IT IS  
3        JUST TO HELP THE CHIP GET INFORMATION INTO THE CHIP THAT IT CAN  
4        MANIPULATE AND THEN SEND DATA OR FILES OUT OF THE CHIP,  
5        INPUT/OUTPUT.

6                SO IF WE GO BACK AND LOOK AT THE BOARD, YOU CAN SEE AGAIN  
7        ALL OF THESE LITTLE CONNECTIONS ON THAT GREEN PRINTED CIRCUIT  
8        BOARD ARE CONNECTING THESE PERIPHERALS, MEMORY, CAMERA, ET  
9        CETERA, TO THE MICROPROCESSOR.

10               AND AGAIN, AS WE DISCUSSED, THAT'S IMPORTANT FOR GETTING  
11        THINGS INTO THE CHIP AND OFF OF THE CHIP, WHICH IS MANAGED BY  
12        THE INPUT/OUTPUT INTERFACE ON THE CHIP.

13               SO LET'S TALK A LITTLE BIT MORE ABOUT WHAT A  
14        MICROPROCESSOR DOES AND HOW IT DOES IT. AS YOU CAN SEE, IT HAS  
15        ALL KINDS OF CIRCUITRY ON IT, AND THAT CIRCUITRY IS MADE UP OF  
16        TEENY, TINY PARTS CALLED TRANSISTORS. THEY'RE MICROSCOPIC,  
17        REALLY. I MEAN, WE CAN SEE THINGS ON THIS, ON THIS PICTURE  
18        HERE JUST BECAUSE THEY'RE ACCUMULATED IN SUCH A WAY THAT YOU  
19        CAN SEE GROUPS OF TRANSISTORS BASICALLY.

20               BUT WHAT DOES A MICROPROCESSOR DO THEN? IT HAS THE  
21        ABILITY TO DO MATH FUNCTIONS. FOR EXAMPLE, IT CAN STORE DATA  
22        IN MEMORY, BOTH MEMORY THAT IS ON THE CHIP, AS WELL AS MEMORY  
23        THAT'S OFF THE CHIP.

24               NOW, I DON'T WANT TO GET TOO CONFUSING HERE BECAUSE WE  
25        TALKED ABOUT INPUT/OUTPUT INTERFACE AND HOW IF THE CHIP DOES

1 SOME KIND OF PROCESSING ON A FUNCTION, WHEN IT SENDS IT OFF,  
2 THEN IT WANTS TO SEND IT OFF THE CHIP TO EXTERNAL MEMORY,  
3 THAT'S TRUE.

4 BUT MOST MICROPROCESSORS ACTUALLY ALSO HAVE MEMORY ON THE  
5 CHIP, SO IF YOU LOOK AT THIS ONE IN PARTICULAR, THESE AREAS  
6 THAT LOOK VERY UNIFORM ARE VERY LIKELY MEMORY THAT'S ON THE  
7 CHIP.

8 SO THE MICROPROCESSOR HAS DIFFERENT PARTS. IT'S GOT, YOU  
9 KNOW, THESE MEMORY MODULES, IT'S GOT THE INPUT/OUTPUT INTERFACE  
10 WE TALKED ABOUT FOR GETTING STUFF ON AND OFF THE CHIP.

11 AND THEN THE MOST IMPORTANT PART OF THE MICROPROCESSOR,  
12 THE BRAIN OF THE MICROPROCESSOR IF YOU WILL, IS CALLED THE CPU  
13 OR A CENTRAL PROCESSING UNIT, AND I DON'T KNOW EXACTLY WHERE  
14 THAT IS, BUT IT'S SOMEWHERE IN HERE, AND IT DOES ALL OF THE  
15 EXECUTIONS OF INSTRUCTIONS AND MANIPULATION OF DATA.

16 SO JUST LIKE THE MICROPROCESSOR CHIP IS THE BRAIN OF YOUR  
17 PHONE, THE CPU, OR THE CENTRAL PROCESSING UNIT INSIDE OF THE  
18 MICROPROCESSOR IS THE BRAIN OF THE MICROPROCESSOR.

19 SO IT DOES ALL KINDS OF FUNCTIONS THAT HELP YOU DO THE  
20 THINGS THAT YOU WANT TO DO WITH YOUR PHONE, LIKE WE TALKED  
21 ABOUT, USING THE INTERNET BROWSER, MAKE PHONE CALLS, E-MAIL,  
22 TEXTING, PLAY GAMES, ET CETERA.

23 AND WHAT'S REALLY IMPORTANT TO UNDERSTAND ABOUT HOW THE  
24 MICROPROCESSOR DOES ALL OF THOSE THINGS IS THAT TIMING IS  
25 CRITICAL BECAUSE THE MICROPROCESSOR AND THE DIFFERENT PARTS OF

1 IT HAVE TO KNOW WHEN THINGS ARE GOING TO BE DONE AND WHAT ORDER  
2 THEY'RE DONE IN.

3 SO IN ORDER TO ACHIEVE THAT TIMING SO THAT THE CHIP KNOWS  
4 WHEN TO DO THINGS AND WHAT ORDER TO DO THEM IN, THAT REQUIRES  
5 SOMETHING THAT WE CALL A CLOCK, OR A CLOCK SIGNAL, AND THAT'S  
6 REALLY WHERE NOW WE'RE STARTING TO GET TO CHUCK MOORE'S  
7 INVENTION.

8 SO WHAT IS A CLOCK OR A CLOCK SIGNAL IN THE CONTEXT OF A  
9 MICROPROCESSOR? IT'S ACTUALLY A MUCH SIMPLER, STRAIGHTFORWARD  
10 CONCEPT THAN YOU MIGHT THINK. FOR A MICROPROCESSOR, A CLOCK IS  
11 JUST SOMETHING, A DEVICE THAT SENDS A TIMING SIGNAL TO THE CPU  
12 AND OTHER PARTS OF THE MICROPROCESSOR TO PROVIDE TIMING.

13 IT'S ACTUALLY VERY SIMILAR TO THE TICK, TOCK, TICK, TOCK  
14 OF A NORMAL CLOCK THAT WE'RE ALL FAMILIAR WITH. OR IF YOU HAVE  
15 A DIGITAL WATCH, FOR EXAMPLE, LIKE THIS ONE, WHERE THIS IS  
16 SHOWING 1:00 O'CLOCK, ONE SECOND, TWO SECONDS, WE SEE TIME  
17 GOING BY, AND A CLOCK SIGNAL IS VERY SIMILAR TO THAT IN A  
18 MICROPROCESSOR EXCEPT YOU SEE HERE A CLOCK SIGNAL IN A  
19 MICROPROCESSOR IS REPRESENTED BY THE SQUARE WAVE, AND BASICALLY  
20 EVERY TIME THERE'S AN EDGE OF THE SQUARE WAVE THAT GETS TO A  
21 CERTAIN POINT, THAT'S AN INDICATION THAT AN INSTRUCTION SHOULD  
22 BE EXECUTED, SO THAT WAY THE CLOCK HELPS CONTROL THE TIMING FOR  
23 THE MICROPROCESSOR SO THAT IT KNOWS WHAT TO DO, WHEN TO DO IT,  
24 AND WHAT ORDER TO DO IT IN.

25 SO THE CLOCK IS VERY IMPORTANT TO COORDINATE THE FUNCTIONS

1 OF THE MICROPROCESSOR CHIP, AND FOR THAT MATTER, TO ALSO  
2 COORDINATE THE FUNCTIONS OF THE MICROPROCESSOR CHIP WITH ALL OF  
3 THESE OTHER THINGS IN THE PHONE ON THE PRINTED CIRCUIT BOARD,  
4 BECAUSE JUST LIKE THE FUNCTIONS OF THE MICROPROCESSOR HAVE TO  
5 BE COORDINATED WITH THE TIMING SIGNAL, THE TIMING SIGNAL ALSO  
6 HAS TO BE USED TO COMMUNICATE WITH THINGS OUTSIDE OF THE CHIP,  
7 LIKE CAMERA, MEMORY, ET CETERA.

8 SO THAT'S AN IMPORTANT CONCEPT, HOW IMPORTANT CLOCK  
9 SIGNALS ARE FOR THE TIMING OF A MICROPROCESSOR TO MAKE SURE IT  
10 EXECUTES THINGS IN THE RIGHT ORDER AND AT THE RIGHT TIME.

11 NOW, ANOTHER THING THAT'S IMPORTANT TO UNDERSTAND ABOUT  
12 CLOCK SIGNALS IS A VERY IMPORTANT CHARACTERISTIC OF THEM IS HOW  
13 FAST THEY ARE, BECAUSE THERE ARE SOME FAST CLOCKS AND SOME SLOW  
14 CLOCKS, AND WHEN WE TALK ABOUT THE SPEED OF A CLOCK, THERE'S A  
15 SPECIAL WORD THAT WE USE TO REFER TO THAT AND THAT'S FREQUENCY.

16 SO AS I'M SURE YOU CAN APPRECIATE, IF A MICROPROCESSOR HAS  
17 A FASTER CLOCK SIGNAL WITH A HIGHER FREQUENCY, IT CAN ACTUALLY  
18 DO MORE WORK IN A SHORTER AMOUNT OF TIME.

19 IF IT HAS A LOWER SPEED CLOCK SIGNAL WITH A LOWER  
20 FREQUENCY OR A SLOWER SPEED, IT CAN'T DO AS MUCH WORK IN THE  
21 SAME AMOUNT OF TIME BECAUSE IT EXECUTES INSTRUCTIONS WITH  
22 EVERY, WITH EVERY CLICK OF THE CLOCK SIGNAL, EVERY TICK, TOCK.

23 SO I'M SURE, YOU KNOW, MANY OF US REMEMBER IN HIGH SCHOOL  
24 WHEN WE LEARNED ABOUT SIGN WAVES, AND THAT'S REALLY A VERY  
25 SIMILAR CONCEPT OF THESE SQUARE WAVES HERE EXCEPT THAT THEY'RE

1 SQUARE INSTEAD OF BEING WAVY LINE A SIGN WAVE.

2 SO CLOCK SIGNALS IN A COMPUTER -- LET ME TALK TO YOU ABOUT  
3 HOW THEY'RE REPRESENTED NORMALLY.

4 SO IN A COMPUTER, EVERYTHING IS DONE NORMALLY WITH 1'S AND  
5 0'S, AND A LOT OF TIMES THAT'S KEPT TRACK OF WITH A VOLTAGE.

6 SO IF YOU LOOK AT THIS CLOCK SIGNAL AND WE JUST KEEP IT ON  
7 THE SCREEN HERE FOR A MINUTE, THE LOW PART OF THIS SQUARE WAVE  
8 IS PROBABLY REPRESENTED BY A LOW VOLTAGE LIKE 0 VOLTS, AND THE  
9 TOP PART OF THE SQUARE WAVE IS PROBABLY REPRESENTED IN A  
10 COMPUTER BY A HIGHER VOLTAGE, LIKE 1 VOLT.

11 SO BASICALLY -- IF WE COULD RUN THE ANIMATION AGAIN, BILL,  
12 PLEASE? THANK YOU.

13 YOU'VE GOT THIS ALTERNATING HIGH/LOW SIGNAL, AND IN A  
14 COMPUTER, AGAIN, IT WOULD BE HIGH, LOW, HIGH, LOW, MEANING A  
15 HIGH VOLTAGE, LOW VOLTAGE. OR 1, 0, 1, 0, WHICH IS HOW  
16 COMPUTERS DO EVERYTHING BASICALLY. THEY STORE INFORMATION IN  
17 1'S AND 0'S.

18 THAT'S HOW THE CLOCKS ARE, TOO. SO THIS -- LET'S RUN THIS  
19 ONE MORE TIME JUST SO THAT WE CAN LOOK AT THE FREQUENCY CHANGE  
20 AGAIN.

21 LIKE WE TALKED ABOUT, THERE ARE ALSO DIFFERENT -- IT'S  
22 POSSIBLE TO HAVE A DIFFERENT FREQUENCY FOR A CLOCK. SO IF YOU  
23 LOOK AT THIS ONE IN PARTICULAR, THIS IS KIND OF A SLOW  
24 FREQUENCY, WHICH MEANS THAT THESE SQUARE WAVES ARE BIGGER,  
25 THEY'RE FATTER, IT TAKES LONGER FOR THEM TO GO BY THE DOTTED

1 LINE, AND SO THAT WE WOULD SAY IS A LOW FREQUENCY.

2 HERE WE GET A FASTER FREQUENCY BECAUSE THE SQUARE WAVES  
3 ARE SHORTER. THEY'RE SHORTER AND THEY'RE CLOSER TOGETHER AND  
4 THAT, AGAIN, ALLOWS MORE INSTRUCTIONS TO BE EXECUTED BY THE  
5 COMPUTER, MORE WORK TO GET DONE IN A SHORTER AMOUNT OF TIME.

6 YOU MAY HAVE ALSO HEARD ABOUT HOW FREQUENCY IS MEASURED.  
7 YOU MAY HAVE HEARD OF THE TERM "HERTZ." A HERTZ BASICALLY  
8 MEANS ONE CYCLE PER SECOND, AND SO IF WE'RE TALKING ABOUT A  
9 CYCLE WITH A SQUARE WAVE CLOCK SIGNAL, WE'RE TALKING ABOUT THE  
10 TIME IT TAKES TO GO FROM HIGH TO LOW AND BACK UP TO HIGH.  
11 THAT'S ONE CYCLE. SO IF IT TAKES ONE SECOND TO DO THAT, THAT'S  
12 1 HERTZ.

13 NOW, YOU MAY ALSO BE FAMILIAR THAT RADIO STATIONS, FM  
14 RADIO STATIONS MEASURE THEIR FREQUENCY IN MEGAHERTZ, AND A  
15 MEGAHERTZ IS ONE MILLION CYCLES PER SECOND.

16 SO WITH THAT BACKGROUND, NOW LET'S GO BACK TO 1988, THE  
17 YEAR BEFORE CHUCK MOORE CAME UP WITH HIS INVENTION IN THE '336  
18 PATENT.

19 WHAT DID MICROPROCESSORS USE FOR CLOCKS AND CLOCK SIGNALS  
20 IN 1988? WELL, GENERALLY THEY USED A LITTLE COMPONENT CALLED A  
21 CRYSTAL OSCILLATOR.

22 NOW, YOU PROBABLY HAVE HEARD THAT A LOT OF WRISTWATCHES  
23 USE A QUARTZ CRYSTAL. BUT WHAT DO THEY USE IT FOR? IT'S  
24 ACTUALLY USED TO PROVIDE A VIBRATING CLOCK SIGNAL TO THE WATCH  
25 WHICH THE WATCH THEN USES TO KEEP TRACK OF TIME.

1           AND THE REASON THEY USE A QUARTZ CRYSTAL IS THAT IF YOU  
2           CUT THE QUARTZ CRYSTAL VERY PRECISELY IN A SPECIAL SHAPE AND  
3           SIZE AND YOU PUT IT IN AN ELECTRIC COMPONENT AND PUT SOME  
4           ELECTRICITY ON IT, IT WILL VIBRATE, OR WHAT WE CALL OSCILLATE,  
5           AND IT OSCILLATES IN A VERY PREDICTABLE MANNER, SO THAT WAY  
6           THAT VIBRATION CAN BE USED BY THE WATCH TO KEEP TRACK OF TIME.

7           WELL, BACK IN 1988, COMPUTERS ALSO USED QUARTZ CRYSTAL  
8           OSCILLATORS TO PROVIDE A CLOCK SIGNAL TO COMPUTERS, AND THIS IS  
9           HOW THEY DID IT, THE SAME WAY. THEY TAKE A PIECE OF QUARTZ,  
10          THEY CUT IT IN A VERY PRECISE SHAPE AND SIZE, SOMETIMES  
11          INVOLVING POLISHING OR WHATEVER, AND THEY PUT IT IN A  
12          COMPONENT. IT'S ACTUALLY NOT REALLY EXPOSED LIKE THIS. IT'S  
13          USUALLY IN WHAT THEY CALL A TIN CAN. IT LOOKS LIKE A LITTLE  
14          METAL THING ON THE PRINTED CIRCUIT BOARD.

15          AND THEN THEY PUT ELECTRICITY ON IT AND IT VIBRATES, JUST  
16          LIKE A TUNING FORK IF YOU'RE FAMILIAR WITH THAT, AND IT  
17          VIBRATES IN A VERY PREDICTABLE WAY TO PROVIDE A CLOCK SIGNAL,  
18          THIS TICK, TOCK, TICK, TOCK WE'VE BEEN TALKING ABOUT.

19          NOW, QUARTZ CRYSTAL OSCILLATORS WERE USED TO PROVIDE A  
20          CLOCK SIGNAL FOR ESSENTIALLY ALL MICROPROCESSORS IN 1988 BEFORE  
21          CHUCK MOORE'S INVENTION, AND HERE'S AN ILLUSTRATION OF THAT.

22          SO WE HAVE A PRINTED CIRCUIT BOARD AGAIN, WE'VE GOT A  
23          MICROPROCESSOR, AND WE'VE GOT THIS EXTERNAL COMPONENT AND THAT  
24          IS REPRESENTING AN EXTERNAL QUARTZ CRYSTAL OSCILLATOR THAT  
25          IS -- THAT HAS ELECTRICITY SENT TO IT AND IT'S VIBRATING AND SO

1 IT'S CREATING THIS OSCILLATING CLOCK SIGNAL THAT CAN BE USED AS  
2 A 1, 0, 1, 0 TIMING SIGNAL FOR THE MICROPROCESSOR TO EXECUTE  
3 ITS WORK.

4 NOW, HOW FAST WERE THOSE MICROPROCESSORS IN THE 1988, 1989  
5 TIMEFRAME THAT WERE CLOCKED WITH THESE CRYSTAL OSCILLATORS?  
6 THE FASTEST ONES WERE GENERALLY ABOUT 10 MEGAHERTZ, WHICH IS 10  
7 MILLION CYCLES PER SECOND.

8 NOW, THAT SOUNDS PRETTY FAST, RIGHT?

9 BUT IT'S REALLY NOTHING COMPARED TO THE SPEED OF TODAY'S  
10 MICROPROCESSORS IN MODERN CELL PHONES AND OTHER ELECTRONIC  
11 DEVICES BECAUSE NOW WE HAVE SMARTPHONES AND COMPUTERS THAT RUN  
12 AT 1 OR 2 GIGAHERTZ, AND JUST FOR REFERENCE, A GIGAHERTZ IS ONE  
13 BILLION CYCLES PER SECOND, AND THAT'S 100 TIMES FASTER THAN ONE  
14 OF THESE QUARTZ CRYSTAL OSCILLATORS BACK IN '88 AND '89.

15 BUT EVEN THOUGH WE HAVE CLOCKS NOW THAT ARE MUCH FASTER,  
16 THERE WERE SOME BENEFITS TO USING CRYSTAL CLOCKS, AND ONE IS  
17 THAT THEY'RE VERY PREDICTABLE. THE FREQUENCY OF THE CRYSTAL  
18 CLOCK REALLY DOESN'T CHANGE MUCH IF YOU CHANGE THE VOLTAGE TO  
19 IT OR IF YOU CHANGE THE TEMPERATURE, WHICH IS NOT REALLY TRUE  
20 OF SEMICONDUCTOR CHIPS.

21 THE PERFORMANCE OF A COMPUTER CHIP CAN ACTUALLY GO DOWN OR  
22 UP DEPENDING ON CONDITIONS. YOU KNOW, IF YOU HAVE -- IF YOU'VE  
23 EVER HAD A COMPUTER THAT WAS OVERHEATING, THAT ACTUALLY  
24 DEGRADES THE PERFORMANCE. IT MAKES THE PERFORMANCE OF THE  
25 CHIPS IN THE COMPUTER WORSE BECAUSE IT'S TOO HOT WHICH IS WHY



1 COMPUTERS OFTEN HAVE FANS.

2 AND BY THE SAME TOKEN, IF YOU RAISE THE VOLTAGE FOR A  
3 SEMICONDUCTOR CHIP, GENERALLY IT'S ABLE TO GO FASTER AND DO  
4 MORE WORK IN A SHORTER AMOUNT OF TIME.

5 BUT IT'S NOT REALLY THAT WAY WITH THE CRYSTAL OSCILLATORS.

6 SO LET'S TAKE A LOOK AT THIS ANIMATION HERE. AND THIS IS  
7 THE WAY, AGAIN, CLOCKING WAS DONE BACK IN THE '88, '89  
8 TIMEFRAME WHEN CHUCK MOORE CAME UP WITH HIS INVENTION.

9 SO YOU SEE HERE WE HAVE AN OFF-CHIP CRYSTAL OSCILLATOR  
10 WITH A 20 MEGAHERTZ CRYSTAL CLOCK, AND THAT'S -- THE SPEED OF  
11 IT IS REPRESENTED BY THIS ORANGE BALL, AND IT'S VERY REGULAR.

12 OVER HERE ON THE LEFT WE HAVE THIS THERMOMETER WHICH SHOWS  
13 THAT WHEN IT'S HOT -- LET'S TRY THIS. WHEN IT'S COOL, ACTUALLY  
14 THE SEMICONDUCTOR CHIP HAS THE ABILITY TO RUN WAY FASTER.

15 BUT THE SPEED OF THE CPU IS CONTROLLED BY THE OFF-CHIP  
16 CRYSTAL, SO IF YOU LOOK AT THE ORANGE BALLS ON BOTH OF THESE,  
17 THEY ARE TRACKING EACH OTHER. DO YOU SEE THAT? THE ORANGE  
18 BALL IN THE CPU IS ALWAYS GOING AT THE SAME SPEED AND IT  
19 CORRESPONDS TO THE ORANGE BALL ON THE CRYSTAL OSCILLATOR, AND  
20 THAT'S BECAUSE -- AND THIS IS VERY IMPORTANT TO UNDERSTAND -- A  
21 MICROPROCESSOR, OR A CPU, CAN NEVER GO FASTER THAN ITS CLOCK  
22 SIGNAL. IN FACT, IT MUST EXECUTE INSTRUCTIONS AT EXACTLY THE  
23 SAME RATE AS THE CLOCK SIGNAL.

24 SO HERE WE SEE, WHEN TEMPERATURE GOES UP AND DOWN, THE  
25 SPEED OF THE CRYSTAL OSCILLATOR STAYS THE SAME, AND THAT MAKES

1 THE SPEED OF THE CPU STAY THE SAME.

2 SO WHAT, MAY YOU ASK, IS THE PURPLE BALL? THE PURPLE BALL  
3 SIMPLY REPRESENTS THE CAPABILITY OF THE CPU, AND IT'S WASTED IN  
4 THIS EXAMPLE. SO YOU SEE WHEN IT GETS COOL, THE PURPLE BALL  
5 RACES AROUND. THAT MEANS THAT THE CPU COULD GO FASTER.

6 BUT IT'S LIMITED BY THE CLOCK SIGNAL FROM THE CRYSTAL  
7 CLOCK. SO THE CPU ALWAYS HAS TO GO AT THE SPEED OF THE  
8 EXTERNAL CRYSTAL REPRESENTED BY THE ORANGE BALL.

9 NOW, WE HAVE THE OPPOSITE EFFECT WITH VOLTAGE, OR I SHOULD  
10 SAY THE OPPOSITE EFFECT ON A CPU, ON A COMPUTER CHIP.

11 SO IF WE RUN THIS ANIMATION, YOU CAN SEE THAT WITH LOW  
12 VOLTAGE, EVERYTHING IS GOING ABOUT THE SAME SPEED. AGAIN, THIS  
13 CPU IS BEING CLOCKED BY THE EXTERNAL CRYSTAL OSCILLATOR, THE  
14 ORANGE BALL.

15 NOW, VOLTAGE GOES UP. THE CPU COULD GO FASTER, A COMPUTER  
16 CHIP CAN GO FASTER IF THE VOLTAGE GOES UP.

17 BUT THE EXTERNAL CRYSTAL CLOCK WON'T LET IT BECAUSE IT'S  
18 PROVIDING THE CLOCK SIGNAL TO THE CPU AND, AGAIN, THE CPU  
19 CANNOT EXECUTE INSTRUCTIONS AT A DIFFERENT SPEED THAN THE CLOCK  
20 SIGNAL. THEY'RE ALWAYS THE SAME SPEED.

21 SO THAT, IF YOU WILL, IS A BIT OF A DISADVANTAGE FROM  
22 USING AN OFF-CHIP CRYSTAL CLOCK BECAUSE UNDER GOOD CONDITIONS,  
23 YOU CAN'T REALLY TAKE ADVANTAGE OF IT. YOU'RE LIMITED IN SPEED  
24 WITH THE OFF-CHIP CRYSTAL CLOCK.

25 AND THE OTHER, THE OTHER PROBLEM WITH CRYSTALS -- LET'S GO

1 TO THE NEXT SLIDE, IF WE COULD, PLEASE, BILL -- I KNOW WE'VE  
2 SEEN THIS BEFORE, BUT THERE'S A MANUFACTURING PROBLEM WITH  
3 CRYSTAL OSCILLATORS, WHICH IS THAT IF YOU WANT A FASTER CRYSTAL  
4 OSCILLATOR, YOU HAVE TO CUT THE CRYSTAL SMALLER AND SMALLER SO  
5 THAT IT VIBRATES FASTER AND FASTER. SO A SMALL CRYSTAL  
6 VIBRATES FASTER THAN A BIG ONE.

7 BUT THERE'S A LIMITATION ON HOW FINELY YOU CAN CUT THESE  
8 CRYSTALS SO THAT THEY'LL OSCILLATE VERY QUICKLY, AND BASICALLY  
9 THAT LIMIT IS ABOUT 30 TO 50 MEGAHERTZ. YOU CAN'T REALLY MAKE  
10 A CRYSTAL OSCILLATOR THAT WILL OSCILLATE FASTER THAN 30 TO 50  
11 MEGAHERTZ.

12 SO, AGAIN, TODAY'S CHIPS, THEY'RE RUNNING A HUNDRED TIMES  
13 FASTER THAN THAT ALMOST. THEY'RE RUNNING AT 1, 1.0, 2.0  
14 GIGAHERTZ SOMETIMES, SO WE'RE GOING TO TALK ABOUT WHY THAT IS.

15 SOMETHING ELSE THAT YOU NEED TO UNDERSTAND ABOUT, ABOUT A  
16 CRYSTAL OSCILLATOR IS THAT -- YOU KNOW, I'VE WONDERED BEFORE,  
17 SOME PEOPLE HAVE ASKED ME AND I'VE COME TO LEARN THAT, YOU  
18 KNOW, PEOPLE ASK, WELL, WHY CAN'T YOU JUST TAKE THAT 20  
19 MEGAHERTZ SIGNAL THAT YOU GET FROM THE CRYSTAL OSCILLATOR, AND  
20 WHEN YOU GET IT ONTO THE CHIP COMPUTER, A MICROPROCESSOR, JUST  
21 USE SOME KIND OF CIRCUITRY TO MULTIPLY IT UP? RIGHT?

22 WELL, THE PROBLEM IS, AS A MATTER OF PHYSICS, IT'S NOT  
23 POSSIBLE TO MULTIPLY ONE OF THESE CLOCK SIGNALS AND -- YOU  
24 KNOW, FROM, FOR EXAMPLE, 20 MEGAHERTZ MULTIPLIED BY 10 AND GET  
25 200 MEGAHERTZ. THERE IS NO SUCH CIRCUITRY TO DO

1 MULTIPLICATION.

2 YOU'LL HEAR FROM OUR EXPERT IN THIS CASE, DR. OKLOBDZIJA,  
3 HE'S AT U.C. DAVIS, THAT THAT IS CERTAINLY THE CASE THAT YOU  
4 CAN DIVIDE A CLOCK SIGNAL. SO IF YOU HAVE A 20 MEGAHERTZ  
5 SIGNAL, YOU CAN CUT IT IN HALF SO THAT THERE'S ONLY 10  
6 MEGAHERTZ, AND THERE'S CIRCUITRY THAT YOU CAN PUT ON A CHIP TO  
7 DO THAT, BUT YOU CAN'T MULTIPLY IT.

8 AND SO SPEED, IF WE WANT FASTER ELECTRONIC DEVICES, YOU'VE  
9 GOT TO DO SOMETHING ELSE FOR A CLOCK THAN USE A CRYSTAL  
10 OSCILLATOR, WHICH BRINGS US BACK TO CHUCK MOORE IN 1989.

11 AT THAT TIME, MR. MOORE, WITH HIS CO-INVENTOR,  
12 RUSSELL FISH, DECIDED THAT THEY WERE GOING TO SET OUT TO MAKE A  
13 REVOLUTIONARY NEW PROCESSOR CALLED SHBOOM, AS I MENTIONED  
14 EARLIER, AND THEY CAME UP WITH A REVOLUTIONARY CLOCK FOR THE  
15 SHBOOM CHIP.

16 AND ALTHOUGH MR. MOORE KNEW THAT THE FASTEST  
17 MICROPROCESSORS IN 1989 RAN AT ABOUT 10 MEGAHERTZ, HE WANTED  
18 SHBOOM TO RUN WAY FASTER. HE WANTED SHBOOM TO RUN AT 100  
19 MEGAHERTZ.

20 WELL, HOW COULD HE POSSIBLY DO THAT? IF YOU CAN'T  
21 MULTIPLY A 10 MEGAHERTZ CRYSTAL BY 10 TO GET A HUNDRED, HOW CAN  
22 YOU GET SUCH A FAST CLOCK?

23 WELL, INSTEAD OF USING A CRYSTAL OSCILLATOR TO CLOCK  
24 SHBOOM, HE DECIDED THAT HE WAS GOING TO PUT CIRCUITRY RIGHT ON  
25 THE MICROPROCESSOR CHIP, A SPECIAL CIRCUIT CALLED A RING

1 OSCILLATOR TO PROVIDE THE CLOCK SIGNAL FOR SHBOOM.

2 SO LET'S TALK ABOUT WHAT A RING OSCILLATOR IS.

3 NOW, YOU'LL NOTICE THAT THIS SAYS FIGURE 18. THIS IS  
4 ACTUALLY A FIGURE RIGHT FROM THE '336 PATENT TO EXPLAIN WHAT A  
5 RING OSCILLATOR IS AND WHAT IT DOES.

6 SO BASICALLY IT'S A LITTLE TINY CIRCUIT ON THE COMPUTER  
7 CHIP THAT LOOKS LIKE THIS. IT HAS A BUNCH OF INVERTERS  
8 ARRANGED IN A LOOP. NOW, AN INVERTER IS ONE OF THESE TRIANGLE  
9 THINGS WITH A LITTLE BUBBLE ON THE FRONT, AND WHAT IT DOES IS  
10 ACTUALLY VERY SIMPLE.

11 IF WE CAN RUN THE ANIMATION, BILL? THANK YOU.

12 SO AN INVERTER CHANGES THE SIGNAL THAT'S GOING THROUGH IT  
13 FROM 1 TO 0 OR 0 TO 1. REMEMBER HOW WE TALKED ABOUT HOW  
14 COMPUTERS KEEP TRACK OF THINGS IN 1'S AND 0'S? SO ALL THE  
15 INVERTER DOES IS CHANGE THE SIGNAL FROM 1 TO 0 OR 0 TO 1, AND  
16 YOU HAVE AN ODD NUMBER OF INVERTERS ARRANGED IN A LOOP OR A  
17 RING, WHICH IS WHY YOU CALL IT A RING OSCILLATOR.

18 NOW, YOU HAVE TO HAVE AN ODD NUMBER, BECAUSE IF YOU HAD AN  
19 EVEN NUMBER, YOU WOULDN'T GET AN OSCILLATED SIGNAL.

20 AND LET ME EXPLAIN TO YOU A LITTLE BIT MORE ABOUT HOW THIS  
21 WORKS, BECAUSE IF YOU LOOK AT THIS, THE CLOCK SIGNAL WHICH YOU  
22 SEE DOWN HERE, THE ANIMATION AT THE BOTTOM, ISN'T REPRESENTED  
23 BY, YOU KNOW, THIS SIGNAL JUST GOING THROUGH EACH OF THESE  
24 INVERTERS, 1, 0, 1, 0, EACH TIME YOU GO THROUGH AN INVERTER.

25 THE WAY YOU GET A CLOCK SIGNAL FROM THIS IS YOU ACTUALLY

1 HAVE TO LOOK AT THE 1 PLACE ON THE RING, LIKE LET'S CHOOSE  
2 PHASE 3, WHEN IT GOES BY IT'S A 1.

3 NOW LET'S SEE WHAT IT IS WHEN IT COMES BACK. THIS TIME  
4 IT'S A 0.

5 AND SO THAT'S WHERE YOU GET YOUR CLOCK SIGNAL. THAT'S  
6 WHERE YOU GET YOUR SQUARE SIGN WAVE BY SAMPLING ONE SPOT ON  
7 THAT RING OSCILLATOR.

8 IF YOU WANT THE RING OSCILLATOR TO GO FASTER AND BE A  
9 FASTER CLOCK, YOU CAN TAKE INVERTERS OUT, BECAUSE EACH OF THESE  
10 INVERTERS CAUSES A LITTLE BIT OF A DELAY WHICH IS WHY YOU GET  
11 THIS ALTERNATING SIGNAL WHICH IS REPRESENTED BY YOUR SQUARE,  
12 YOUR SQUARE WAVE AT THE BOTTOM.

13 SO THAT'S HOW A RING OSCILLATOR WORKS, AND THAT WAS THE  
14 CLOCK THAT CHUCK MOORE CHOSE FOR HIS CLOCK IN SHBOOM TO CLOCK  
15 THE CPU BECAUSE HE WANTED THE CPU AGAIN TO GO TEN TIMES FASTER  
16 THAN THE FASTEST CHIPS THAT WERE RUNNING AT THAT TIME.

17 NOW, THE COOL THING ABOUT RING OSCILLATORS IS THAT THEY'RE  
18 MADE UP -- AND, YOU KNOW, WE SAW PICTURES OF CHIPS EARLIER.  
19 THE RING OSCILLATOR, INSTEAD OF BEING MADE OF THAT BIG CRYSTAL  
20 IN A LITTLE TIN CAN ON THE BOARD, ON THE PRINTED CIRCUIT BOARD,  
21 THE RING OSCILLATOR IS MADE UP OF THESE TEENY, TINY LITTLE  
22 TRANSISTORS, THE SAME TYPES OF TRANSISTORS THAT ARE ON THE REST  
23 OF THE MICROPROCESSOR CHIP. IT'S ALL RIGHT THERE ON THE CHIP.

24 SO YOU HAVE THESE MICROSCOPIC TRANSISTORS, AND THE BENEFIT  
25 OF HAVING A CLOCK MADE OF THAT ON THE SAME CHIP IS THAT IT CAN

1 GO REALLY, REALLY FAST, WHICH WAS SOMETHING THAT CHUCK MOORE  
2 WANTED.

3 NOW, HIS ACTUAL SHBOOM CHIP DID NOT RUN AT 100 MEGAHERTZ,  
4 BUT IT DID RUN AT 70 AND, AGAIN, THAT WAS MORE THAN TWICE AS  
5 FAST AS THE INTEL 486 PROCESSOR WHICH WASN'T AVAILABLE UNTIL  
6 THE END OF '89.

7 SO HE DID COME UP WITH SOMETHING TRULY REVOLUTIONARY, A  
8 REALLY FAST CLOCK THAT WAS ON THE SAME CHIP AS THE CPU.

9 NOW, ANOTHER REALLY COOL THING ABOUT THE RING OSCILLATORS  
10 IS THAT AS SEMICONDUCTOR TECHNOLOGY PROGRESSES OVER TIME, WE  
11 GET SMALLER AND SMALLER AND SMALLER TRANSISTORS.

12 SO FOR POINT OF REFERENCE, IF THIS IS HELPFUL AT ALL, BACK  
13 IN 1989 THE STATE OF THE ART FOR SEMICONDUCTOR TRANSISTORS, THE  
14 LENGTH OF A TRANSISTOR APPROXIMATELY WAS ABOUT .8 MICRONS, AND  
15 A MICRON IS ONE ONE-MILLIONTH OF A METER, SO YOU'RE TALKING  
16 ABOUT SOMETHING THAT'S REALLY LITTLE.

17 BUT WHAT WE HAVE TODAY IS MUCH, MUCH SMALLER BECAUSE THE  
18 CHIPS THAT INTEL MAKES TODAY IN 2013 ARE ACTUALLY 22 NANOMETERS  
19 IS THE LENGTH OF A TRANSISTOR, AND A NANOMETER IS ONE  
20 ONE-BILLIONTH OF A METER.

21 SO THE TRANSISTOR SIZE TODAY IS ABOUT 36 TIMES SMALLER  
22 THAN IT WAS IN 1989, AND THAT MEANS THAT THE TRANSISTORS, LIKE  
23 THE RING OSCILLATOR, CAN RUN AT SPEEDS OF ALMOST 50 TIMES  
24 FASTER THAN THEY DID BACK IN 1989.

25 BUT WITH THE PROGRESS IN SEMICONDUCTOR TECHNOLOGY IN

1 SHRINKING THESE CHIPS DOWN IN THESE LITTLE TRANSISTORS AND  
2 GETTING ALL THIS SPEED INCREASE, ALL OF THAT WOULD BE WASTED,  
3 WE WOULDN'T EVEN BE ABLE TO TAKE ADVANTAGE OF IT, EXCEPT FOR  
4 THE FACT THAT CHUCK MOORE CAME UP WITH THIS INVENTION AND PUT A  
5 RING OSCILLATOR CLOCK ON THE SAME CHIP AS THE CPU IN A  
6 MICROPROCESSOR.

7 OTHERWISE WE'D BE STUCK USING CRYSTAL OSCILLATORS TO CLOCK  
8 OUR MICROPROCESSORS STILL.

9 SO FOR MODERN PROCESSORS IN TODAY'S SMARTPHONES, AGAIN,  
10 WE'RE TALKING ABOUT REALLY HIGH FREQUENCIES, 500 MEGAHERTZ, A  
11 GIGAHERTZ, EVEN 3 GIGAHERTZ IN SOME CASES, AND THOSE SPEEDS ARE  
12 IMPOSSIBLE TO ACHIEVE WITH AN EXTERNAL CRYSTAL OSCILLATOR.  
13 IT'S ONLY POSSIBLE TO ACHIEVE THOSE SPEEDS WITH AN ON-CHIP  
14 OSCILLATOR, THE RING OSCILLATOR THAT CHUCK MOORE INVENTED TO  
15 CLOCK THE SHBOOM CHIP WHICH HAS BEEN ADOPTED BY EVERYBODY NOW.

16 NOW, THERE WAS ANOTHER IMPORTANT ASPECT OF CHUCK MOORE'S  
17 INVENTION IN THE SHBOOM CHIP. WE TALKED ABOUT HOW THE  
18 MICROPROCESSOR NEEDS TO COMMUNICATE WITH OTHER THINGS INSIDE  
19 THE PHONE, LIKE MEMORY AND CAMERA AND STUFF LIKE THAT.

20 AND IN MODERN PHONES, YOU KNOW, WE USE USB CABLES AND HAVE  
21 CAMERAS AND EVERYTHING, AND IT'S IMPORTANT TO UNDERSTAND THAT  
22 THOSE PERIPHERALS, WE SOMETIMES CALL THEM, THAT COMMUNICATE  
23 WITH THE INPUT/OUTPUT INTERFACE OF THE MICROPROCESSOR, THEY  
24 CAN'T, THEY CAN'T RUN AT A GIGAHERTZ. THEY HAVE TO RUN MUCH,  
25 MUCH SLOWER.



1           SO CHUCK KNEW THAT HIS SHBOOM CHIP NEEDED TO COMMUNICATE  
2           WITH THESE OTHER THINGS, LIKE MEMORY CHIPS, THAT RUN AT MUCH  
3           SLOWER SPEEDS EVEN AT THAT TIME THAN THE 70 MEGAHERTZ SPEED OF  
4           SHBOOM, AND SO ANOTHER ASPECT OF CHUCK'S INVENTION WAS TO  
5           DECOUPLE THE VERY FAST CPU CLOCK FROM A SLOWER CLOCK THAT WOULD  
6           BE USED TO CLOCK THE I/O INTERFACE.

7           NOW, WHAT DOES "DECOUPLE" MEAN? BASICALLY IT'S JUST A  
8           FANCY WORD FOR SAYING THAT HE HAD TWO DIFFERENT CLOCKS. HE HAD  
9           THE VERY FAST RING OSCILLATOR CLOCK TO CLOCK THE CPU, THE  
10          BRAINS OF HIS MICROPROCESSOR, BUT THEN HE USED A DIFFERENT,  
11          SLOWER CLOCK TO CLOCK THE INPUT/OUTPUT FUNCTIONS WHERE HIS  
12          MICROPROCESSOR CHIP HAD TO COMMUNICATE WITH MEMORY AND OTHER  
13          THINGS OFF CHIP.

14          SO LET'S TAKE A LOOK AT THIS NEXT ANIMATION, WHICH IS --  
15          YOU SEE IT SAYS FIGURE 17. AGAIN, THIS IS A MODIFIED VERSION  
16          OF A FIGURE THAT COMES RIGHT FROM THE '336 PATENT, AND THIS  
17          REALLY COMES RIGHT FROM THE INVENTION.

18          LET'S GO AHEAD AND PLAY THE ANIMATION.

19          SO YOU SEE HERE, CHUCK'S GOAL WAS TO MAKE SHBOOM RUN AT  
20          100 MEGAHERTZ, SO WE'VE CHOSEN NUMBERS DOWN AT THAT RANGE.

21          AND REMEMBER WE TALKED ABOUT IF YOU INCREASE VOLTAGE, IT  
22          CAN GO FASTER. SO THE VOLTAGE IS HIGH -- WELL, WE'LL START  
23          WITH VOLTAGE IS LOW AT 50 MEGAHERTZ. VOLTAGE IS HIGH AT 100  
24          MEGAHERTZ. YOU SEE THAT THE RING OSCILLATOR CAN GO VERY FAST  
25          AND IT CLOCKS THE CPU AT THE SAME SPEED.

1 REMEMBER WE SAID THE CPU, OR A MICROPROCESSOR, CAN NEVER  
2 GO A DIFFERENT SPEED THAN THE CLOCK THAT'S CLOCKING IT. SO  
3 THESE TWO ARE ALWAYS IN SYNCH. YOU'VE GOT YOUR RING OSCILLATOR  
4 CLOCK AND THE CPU IS ALWAYS RUNNING AT THAT SPEED AND THAT CAN  
5 BE VERY FAST BECAUSE THEY'RE ON THE SAME CHIP.

6 BUT THE DECOUPLING PART OF THE INVENTION WHERE THE CHIP  
7 HAS TO COMMUNICATE WITH, WITH SLOWER MEMORY AND USB CABLES OR  
8 WHATEVER, YOU SEE THAT THE I/O INTERFACE IS CLOCKED BY ONE OF  
9 THE CRYSTAL CLOCKS BECAUSE THE PERIPHERALS, AND IT'S -- IT WAS  
10 TRUE BACK IN 1989 AND IT'S STILL TRUE TODAY -- THERE ARE  
11 SPECIFICATIONS AND INDUSTRY STANDARDS THAT SAY HOW FAST A CHIP  
12 CAN COMMUNICATE WITH OTHER THINGS AND YOU HAVE TO FOLLOW THOSE.

13 AND SO BASICALLY THAT'S MUCH SLOWER. WE CHOSE A 32  
14 MEGAHERTZ CRYSTAL CLOCK HERE BECAUSE CHUCK ACTUALLY CREATED A  
15 BOARD, A DEVELOPMENT BOARD WITH THE SHBOOM CHIP, AND YOU'LL GET  
16 TO SEE PICTURES OF THAT LATER, WHERE SHBOOM COULD RUN WITH ITS  
17 RING OSCILLATOR CHIP, THE CPU AT A VERY HIGH SPEED, AND THEN  
18 FOR INPUT/OUTPUT FUNCTIONS, THERE WAS ONE OF THOSE LITTLE TIN  
19 CANS ON THE BOARD THAT WAS A 32 MEGAHERTZ CRYSTAL CLOCK.

20 SO THIS WAS AN IMPORTANT ASPECT OF HIS INVENTION, THE  
21 DECOUPLING OF THE FAST RING OSCILLATOR CLOCK FROM THE SLOWER  
22 CLOCK TO CLOCK I/O FUNCTIONS.

23 SO LET'S LEAVE THIS UP HERE AND TALK ABOUT SOME OF THE  
24 IMPORTANT THINGS ABOUT THE INVENTION OF THE '336 PATENT THAT  
25 CHUCK AND RUSSELL FISH CAME UP WITH.

1 FIRST, THE INVENTION ENABLED A HUGE INCREASE IN SPEED AND  
2 PERFORMANCE THAT WASN'T POSSIBLE WHEN THE ENTIRE CHIP WAS BEING  
3 CLOCKED BY ONE OF THESE SLOW, PLODDING, EXTERNAL CRYSTAL  
4 OSCILLATORS.

5 SECOND ASPECT OF THE INVENTION, THE I/O INTERFACE IS  
6 CONNECTED TO ONE OF THESE SLOWER CLOCKS SO THEN IT CAN  
7 COMMUNICATE WITH EXTERNAL THINGS, DO INPUT/OUTPUT FUNCTIONS,  
8 WITHOUT SLOWING DOWN THE REST OF THE CHIP, SO IT'S THIS WHOLE  
9 NOTION OF DECOUPLING.

10 THIRD, YOU CAN ACTUALLY VARY THE SPEED OF THE CHIP BY  
11 INCREASING OR DECREASING VOLTAGE, WHICH IS A BIG ADVANTAGE OVER  
12 USING A CRYSTAL OSCILLATOR WHICH ALWAYS MADE YOUR CHIP RUN AT  
13 THE SAME SPEED.

14 AND FOURTH, THE CPU AND THE RING OSCILLATOR WILL BE  
15 SIMILARLY AFFECTED BY TEMPERATURE.

16 YOU REMEMBER THE OTHER GRAPHIC WE HAD -- ACTUALLY, MAYBE  
17 WE CAN LOOK AT THAT NOW. SO THIS SHOWS THE EFFECTS OF  
18 TEMPERATURE ON THE INVENTION. HERE WE DON'T HAVE THE  
19 INPUT/OUTPUT CLOCK ANIMATED, BUT, AGAIN, THIS IS FIGURE 17 FROM  
20 THE PATENT, AND THIS SHOWS THAT UNDER BAD CONDITIONS, WHEN IT'S  
21 HOT, BOTH THE RING OSCILLATOR AND THE CPU WILL GO SLOWER, AND  
22 UNDER GOOD CONDITIONS, WHERE IT'S COOLER, THE RING OSCILLATOR  
23 CAN CLOCK THE CPU AT A MUCH FASTER SPEED. IT CAN TAKE  
24 ADVANTAGE OF GOOD CONDITIONS.

25 NOW, THERE'S ANOTHER BIG, IMPORTANT ADVANTAGE THAT YOU

1 NEED TO UNDERSTAND WITH THE INVENTION, AND IT HAS TO DO WITH  
2 HOW SEMICONDUCTOR CHIPS ARE MANUFACTURED OR FABRICATED.

3 SO YOU'RE GOING TO HAVE AN OPPORTUNITY TO SEE SOME WAFERS  
4 HERE, BUT BASICALLY THIS IS HOW THE MANUFACTURING PROCESS  
5 WORKS. YOU GET A SILICON WAFER, IT LOOKS LIKE A LITTLE DINNER  
6 PLATE OR SOMETHING LIKE THAT, AND YOU MAKE A WHOLE BUNCH OF  
7 CHIPS ON IT AT THE SAME TIME, AND THE WAY IT'S DONE IS YOU  
8 BUILD UP LAYERS OF DIFFERENT MATERIALS AND ETCH SOME THINGS  
9 AWAY AND ADD MORE LAYERS, SOME OF THEM WILL CONDUCT  
10 ELECTRICITY, SOME OF THEM WON'T, AND THAT'S HOW YOU MAKE THE  
11 CHIPS ON A WAFER.

12 BUT THE PROBLEM WITH IT IS THERE'S A LOT OF VARIATION IN  
13 THE PROCESS, SO A LOT OF TIMES JUST AS A NORMAL RESULT OF THE  
14 SEMICONDUCTOR MANUFACTURING PROCESS, WHICH WE CALL FABRICATION,  
15 GENERALLY IT'S CALLED FABRICATION, SOME OF THE CHIPS HERE MAY  
16 BE REALLY GOOD AND REALLY FAST AND SOME OF THEM MAY BE SLOWER.

17 SO WHAT DID SEMICONDUCTOR MANUFACTURERS DO ABOUT THAT?  
18 HERE'S A WAFER. AGAIN, HERE ALL THE CHIPS ARE DONE.

19 WHAT THEY DO IS THEY ACTUALLY TEST THE CHIPS AFTER THEY'RE  
20 MANUFACTURED. SOME OF THEM ARE FAST, SOME OF THEM ARE SLOWER,  
21 AND SOME OF THEM ARE MEDIUM, AND SO THEY PUT THEM IN DIFFERENT  
22 BINS. THIS IS A PROCESS THEY CALL BINNING.

23 NOW, WHY WOULD THEY DO THAT? THE REASON IS THEY WANT TO  
24 BE ABLE TO SELL THE FAST CHIPS FOR MORE, AND INSTEAD OF  
25 THROWING AWAY THE OLD CHIPS, THEY WANT TO BE ABLE TO SELL THEM

1 FOR SOMETHING, AND SO THESE CHIPS ARE JUST SOLD TO BE SET AT A  
2 LOWER SPEED AND THEY STILL CAN MAKE SOME MONEY BY SELLING THOSE  
3 CHIPS FOR A LOWER AMOUNT OF MONEY.

4 NOW, LET'S GO TO THE NEXT ANIMATION IF WE COULD, PLEASE,  
5 BILL.

6 SO HERE'S WHAT THEY DO WITH THOSE CHIPS. THIS PHONE ON  
7 THE LEFT IS WHAT WE CALL IN MY FAMILY A GRANDMA PHONE BECAUSE  
8 GRANDMA DOESN'T WANT ALL THE BELLS AND WHISTLES OF A  
9 SMARTPHONE. SHE JUST WANTS SOMETHING TO MAKE CALLS WITH. SO  
10 WE CAN PUT ONE OF THESE SLOWER CHIPS IN THERE; A MEDIUM CHIP IN  
11 A SMARTPHONE THAT MAYBE HAS A LOT OF FEATURES BUT IS NOT TOP OF  
12 THE LINE; AND THEN WE WOULD PUT A FAST CHIP IN A TOP OF THE  
13 LINE SMARTPHONE.

14 SO THAT'S BINNING.

15 NOW LET'S GO TO THE NEXT ONE, PLEASE.

16 NOW, THIS ANIMATION AGAIN FROM FIGURE 17 OF THE PATENT  
17 REALLY SHOWS YOU WHAT BINNING OR FABRICATION DIFFERENCES HAVE  
18 TO DO WITH CHUCK MOORE'S INVENTION IN THE '336 PATENT.

19 WE CAN SEE HERE WE HAVE THE DECOUPLED CLOCKS, THE I/O  
20 CLOCK GOING SLOWLY, AND OVER HERE WHAT THIS IS ILLUSTRATING IS  
21 THAT IF YOU HAVE FAST CHIPS, THE RING OSCILLATOR AND THE CPU  
22 ARE BOTH GOING TO BE AFFECTED BY THE FABRICATION DIFFERENCES.

23 SO IF YOU REMEMBER, THERE WAS THAT BIG WAFER, AND SOME OF  
24 THE CHIPS ON THE WAFER ARE GOOD AND SOME OF THEM ARE BAD, BUT  
25 GENERALLY WITHIN A CHIP, BECAUSE THE CHIP ITSELF IS VERY SMALL,

1 IF THE CPU CIRCUITS ARE GOOD IN A CHIP, ITS RING OSCILLATOR  
2 CIRCUITS ARE GOING TO BE GOOD, TOO.

3 AND SO THIS IS THE NOTION THAT IF YOU HAVE A CHIP THAT WAS  
4 SUBJECT TO GOOD FABRICATION CONDITIONS, BOTH THE RING  
5 OSCILLATOR AND THE CPU WILL PERFORM BETTER IN THOSE CHIPS; AND  
6 IF YOU HAVE OTHER CHIPS THAT DID POORLY IN THE FABRICATION  
7 PROCESS, THEY'LL RUN SLOWER.

8 BUT THAT'S OKAY, BECAUSE THE RING OSCILLATOR IS ALWAYS  
9 CLOCKING THE CPU AND THEY GO SLOWER TOGETHER.

10 SO I KNOW THAT'S A LOT OF MATERIAL WE'VE COVERED AND I  
11 APOLOGIZE FOR THAT, BUT, YOU KNOW, THERE'S A LOT OF KIND OF  
12 BASIC STUFF THAT I WANT YOU GUYS TO HOPEFULLY UNDERSTAND AS WE  
13 GO FORWARD IN THIS TRIAL, ESPECIALLY NOW AS WE TALK ABOUT WHY  
14 WE THINK HTC INFRINGES THE '336 PATENT.

15 SO AS WE'VE DISCUSSED -- LET'S KEEP RUNNING THIS, BILL --  
16 AS WE'VE DISCUSSED, THE RING OSCILLATOR IS REALLY THE ENGINE  
17 THAT DRIVES THE -- THAT DRIVES THE CLOCK FOR MODERN  
18 MICROPROCESSORS, INCLUDING, WE BELIEVE, IN HTC'S PRODUCTS.

19 AND AS WE DISCUSSED, IT'S IMPOSSIBLE TO GET A CRYSTAL  
20 OSCILLATOR TO RUN AT THE VERY HIGH FREQUENCIES THAT MODERN  
21 MICROPROCESSORS RUN AT, SO YOU HAVE TO HAVE AN ON-CHIP CLOCK,  
22 ON-CHIP RING OSCILLATOR RUNNING VERY FAST AND TAKE ADVANTAGE OF  
23 THE FACT THAT IT'S MADE OF THESE TEENY, TINY TRANSISTORS THAT  
24 RUN VERY QUICKLY TO GET THOSE HIGH CLOCK SPEEDS.

25 NOW, LET'S GO TO THE NEXT SLIDE, IF WE COULD, PLEASE,

1 BILL.

2 HERE'S ANOTHER FIGURE THAT SHOWS A RING OSCILLATOR, AND  
3 WHAT I WANT YOU TO UNDERSTAND HERE IS THAT A RING OSCILLATOR  
4 WILL WORK AND OSCILLATE AS LONG AS IT HAS POWER, AND AS A  
5 TECHNICAL MATTER -- AGAIN, I'M NOT AN ELECTRICAL ENGINEER --  
6 BUT ESSENTIALLY EACH ONE OF THE INVERTERS IN THE RING  
7 OSCILLATOR HAS TO HAVE A POWER SUPPLY, WHICH MEANS IT HAS BOTH  
8 POWER AND GROUND. HERE I'VE JUST KIND OF SIMPLIFIED IT AND  
9 SHOWN THAT IT HAS POWER.

10 BUT THE IMPORTANT THING TO UNDERSTAND IS THAT WHEN YOU  
11 TURN YOUR PHONE ON AND THE CHIP GETS POWER, THIS THING WILL  
12 START TO OSCILLATE ALL BY ITSELF. IT DOESN'T NEED ANY  
13 PROMPTING. IT DOESN'T NEED ANY HELP. ALL IT NEEDS IS POWER  
14 AND IT WILL AUTOMATICALLY START RAMPING UP AND GENERATING A  
15 CLOCK SIGNAL. THE RING OSCILLATOR IS THE ENGINE THAT IS THE  
16 CLOCK OF THE CPU AND IT GENERATES A CLOCK SIGNAL ALL BY ITSELF.

17 NOW LET'S LOOK AT A -- THIS IS KIND OF A HIGH LEVEL  
18 REPRESENTATION OF WHAT AN HTC PRODUCT LOOKS LIKE, AND WE'RE  
19 GOING TO FOCUS ON THE MICROPROCESSOR CHIP IN THE HTC PRODUCT.

20 SO FIRST WHAT WE HAVE HERE, HERE'S THE MICROPROCESSOR,  
21 IMAGINE THAT IT'S IN AN HTC PHONE, AND THE EVIDENCE WILL SHOW,  
22 LADIES AND GENTLEMEN, THAT EVERY SINGLE HTC PHONE HAS A  
23 PROCESSOR WITH A RING OSCILLATOR THAT IS THE HEART OF THE  
24 ENGINE OF THAT CLOCK, AND IT CLOCKS THE CPU.

25 NOW, WHAT ELSE DO THESE PROCESSORS HAVE? THEY ALL HAVE AN

1 INPUT/OUTPUT INTERFACE THAT HELPS THE CHIPS GET THINGS, DATA,  
2 FILES FROM OFF THE CHIP AND ON THE CHIP.

3 NOW, HOW DO THEY CLOCK THAT I/O INTERFACE IN THE HTC  
4 PHONES?

5 WELL, THEY'RE ACTUALLY NOT CLOCKED BY THE RING OSCILLATOR.  
6 THE CLOCKING SYSTEM IS DECOUPLED.

7 DOES THAT SOUND FAMILIAR? THAT'S CHUCK MOORE'S INVENTION.  
8 HIS INVENTION WAS TO HAVE A RING OSCILLATOR CLOCK IN THE CPU,  
9 TO HAVE AN INPUT/OUTPUT INTERFACE THAT IS CLOCKED BY AN  
10 INDEPENDENT CLOCK.

11 THEY'VE GOT THAT. EVERY PRODUCT -- THE EVIDENCE WILL SHOW  
12 THAT EVERY ONE OF THEIR PRODUCTS HAS THAT.

13 SO LET'S GO TO THE NEXT SLIDE, PLEASE, BILL. ACTUALLY,  
14 I'M GOING TO SKIP OVER THIS ONE. LET'S GO TO THE NEXT ONE.  
15 OKAY, YEAH. LET'S RUN THIS.

16 SO AS A RESULT OF THE HTC PHONES HAVING MICROPROCESSORS  
17 THAT HAVE A RING OSCILLATOR AND A CPU ON THE SAME CHIP, AS WE  
18 JUST SAW -- AND AGAIN, THIS IS AN ANIMATION FROM FIGURE 17 OF  
19 THE PATENT -- THAT MEANS IF THERE ARE ANY FABRICATION PROBLEMS  
20 WITH THOSE CHIPS DURING THE MANUFACTURING PROCESS, THE SPEED OF  
21 THE RING OSCILLATOR AND THE CPU WILL VARY TOGETHER AS THOSE  
22 CHIPS ARE RUNNING.

23 NOW, THIS ANIMATION, I JUST WANT TO MAKE SURE YOU'RE NOT  
24 CONFUSED ABOUT IT BECAUSE IT IS A LITTLE BIT -- IT IS A BIT  
25 CONFUSING. I DON'T WANT TO SAY IT'S CONFUSING. I JUST WANT TO



1 MAKE SURE YOU UNDERSTAND THAT THE VARIATION BASED ON PROCESS  
2 DIFFERENCES IS NOT SOMETHING THAT HAPPENS IN THE SAME CHIP  
3 WHILE THE CHIP IS OPERATING.

4 SO YOU'VE GOT GOOD CHIPS FROM THE FABRICATION PROCESS AND  
5 BAD CHIPS FROM THE FABRICATION PROCESS.

6 THE GOOD ONES, WITH THE GOOD ONES, THE RING OSCILLATOR AND  
7 THE CPU ARE GOING TO RUN FASTER TOGETHER, AND THAT'S BASICALLY  
8 SOMETHING THAT'S SET AT THE FACTORY BECAUSE THE FABRICATION  
9 PROCESS WORKED WELL FOR THOSE CHIPS.

10 AND THEN YOU'RE GOING TO HAVE OTHER CHIPS WHERE THE  
11 FABRICATION PROCESS DIDN'T WORK AS WELL. AGAIN, THAT'S  
12 SOMETHING THAT'S SET AT THE FACTORY. THAT DOESN'T MEAN THAT  
13 THE CHIP IS GOING TO BE CHANGING FROM 800 MEGAHERTZ TO 1.3  
14 GIGAHERTZ IN OPERATION, NOT THE SAME CHIP. THOSE ARE DIFFERENT  
15 CHIPS. IT'S JUST THAT THE RING OSCILLATOR AND THE CPU VARY  
16 TOGETHER IN DIFFERENT CHIPS DEPENDING ON HOW THEY WERE  
17 FABRICATED.

18 SO THERE'S NO DOUBT THAT HTC IS TAKING ADVANTAGE OF  
19 CHUCK MOORE'S INVENTION. THEY GET THIS HUGE INCREASE IN SPEED  
20 THAT YOU CAN'T POSSIBLY GET BY CLOCKING YOUR CHIP WITH AN  
21 EXTERNAL CRYSTAL OSCILLATOR.

22 THEY'RE ALSO TAKING ADVANTAGE OF THE FACT THAT YOU -- THAT  
23 THE RING OSCILLATOR CLOCK AND THE CPU VARY TOGETHER DEPENDING  
24 ON FABRICATION DIFFERENCES.

25 THE OTHER THING THEY TAKE ADVANTAGE OF -- ACTUALLY, MAYBE

1 LET'S GO BACK TO THE PREVIOUS ANIMATION -- THE OTHER THING THAT  
2 THEY TAKE ADVANTAGE OF IS THAT THEY CAN CHANGE VOLTAGE OR POWER  
3 SO THAT THE CLOCK SPEED OF THEIR PHONES CAN CHANGE OVER TIME.

4 SO SOMETIMES THEIR PHONES MAY RUN AT A LOW CLOCK SPEED TO  
5 CONSERVE POWER, AND OTHER TIMES THEY HAVE TO DO MORE WORK SO  
6 THEY HAVE TO RUN AT A HIGHER CLOCK SPEED, AND YOU CAN ADJUST  
7 THAT, AS WE DISCUSSED, BY ADJUSTING VOLTAGE OR POWER SUPPLY.

8 OKAY. LET'S SKIP AHEAD TWO SLIDES NOW, PLEASE, BILL.

9 SO, AGAIN, HERE'S AN HTC PHONE WITH A PROCESSOR. IT HAS A  
10 RING OSCILLATOR AND A CPU.

11 NEXT.

12 IT HAS AN I/O INTERFACE THAT'S CONNECTED TO PERIPHERALS.  
13 THE I/O INTERFACE HAS A DECOUPLED CLOCKING SYSTEM. IT'S  
14 CLOCKED BY SOMETHING DIFFERENT.

15 SO WHAT'S THEIR ARGUMENT THAT THEY DON'T INFRINGE, THEN?  
16 WELL, LET'S TAKE A LOOK AT THAT.

17 NEXT.

18 THEY ACTUALLY ADD SOME EXTRA STUFF AROUND THE RING  
19 OSCILLATOR.

20 NEXT, PLEASE.

21 AND THIS EXTRA STUFF IS WHAT THEY CALL A PLL, OR A PHASE  
22 LOCK LOOP.

23 NOW, THE PURPOSE OF THE PLL, AND WE CAN TALK ABOUT WHAT  
24 EACH ONE OF THESE DOES, IT'S A LITTLE BIT COMPLICATED BUT, YOU  
25 KNOW, WE CAN KIND OF WORK THROUGH IT, THAT THE MAIN POINT HERE

1 TO UNDERSTAND IS THAT THE CLOCK SIGNAL, THIS VERY FAST -- LET'S  
2 GO TO THE NEXT SLIDE -- THE VERY FAST CLOCK SIGNAL, THE CLOCK'S  
3 A CPU -- NEXT -- AT 2.0 GIGAHERTZ, FOR EXAMPLE, THAT COMES FROM  
4 THIS RING OSCILLATOR CLOCK. THAT'S THE ENGINE THAT CREATES  
5 THIS VERY FAST CLOCK SIGNAL.

6 LET'S TALK ABOUT WHAT ALL THIS OTHER STUFF IS BECAUSE IT  
7 LOOKS A LITTLE CONFUSING, BUT ESSENTIALLY, IN A NUTSHELL, THIS  
8 OTHER STUFF IN THE PLL, THE PURPOSE OF IT IS TO TRY TO ADJUST  
9 OR REGULATE THE FREQUENCY OF THE RING OSCILLATOR SO THAT IT'S  
10 ALWAYS RUNNING AT 2 GIGAHERTZ IN THIS EXAMPLE.

11 AND THAT'S WHAT THEY SAY THEY DO. THEY SAY THEY DON'T  
12 INFRINGE BECAUSE THE SPEED OF THE RING OSCILLATOR AND THE SPEED  
13 OF THE CPU DO NOT VARY TOGETHER WITH CHANGES IN TEMPERATURE OR  
14 VOLTAGE OR SEMICONDUCTOR FABRICATION DIFFERENCES THAT WE'VE  
15 TALKED ABOUT.

16 BUT, AGAIN, IT'S IMPORTANT FOR YOU TO UNDERSTAND THAT THIS  
17 RING OSCILLATOR IS WHAT PROVIDES THAT 2 GIGAHERTZ CLOCK SIGNAL  
18 TO THE CPU.

19 AS WE'VE DISCUSSED, IT IS IMPOSSIBLE FOR THAT CRYSTAL  
20 OSCILLATOR, OR ANY CRYSTAL OSCILLATOR, TO PROVIDE A CLOCK  
21 SIGNAL THAT'S THAT FAST.

22 SO WHAT HAPPENS HERE? LET'S TAKE A FEW MINUTES TO TALK  
23 ABOUT HOW THIS WORKS.

24 SO WHAT HAPPENS FIRST, LIKE WE TALKED ABOUT, YOU TURN ON  
25 THE CHIP, IT GETS POWER, THERE'S POWER TO EACH INVERTER OF THE

1 RING OSCILLATOR, AND IT STARTS GOING, AND WITH THOSE TEENY,  
2 TINY TRANSISTORS, IT IS SPINNING AWAY REALLY, REALLY FAST  
3 GENERATING A REALLY FAST CLOCK SIGNAL.

4 WELL, THEN THE PLL KICKS IN, AND SO YOU'RE CLOCKING THE  
5 CPU AT THIS VERY FAST FREQUENCY AND YOU TAKE THAT 2 GIGAHERTZ  
6 SIGNAL AND YOU PUT IT THROUGH WHAT'S CALLED A FREQUENCY  
7 DIVIDER.

8 REMEMBER HOW WE SAID YOU CAN'T MULTIPLY A CLOCK SIGNAL TO  
9 GET A FASTER FREQUENCY, BUT YOU CAN DIVIDE IT TO GET A SLOWER  
10 ONE.

11 SO THIS IS WHAT THEY DO. THEY TAKE THIS 2 GIGAHERTZ CLOCK  
12 SIGNAL, THEY DIVIDE IT BY A HUNDRED BECAUSE THIS IS A HUNDRED  
13 TIMES FASTER THAN THAT EXTERNAL CRYSTAL, AND THEY TAKE THAT 20  
14 MEGAHERTZ SIGNAL AND DIVIDE IT BY A HUNDRED AND THEY FEED IT  
15 INTO THIS PHASE DETECTOR.

16 AND YOU CAN SEE THAT THERE'S SOMETHING ELSE COMING INTO  
17 THE PHASE DETECTOR, TOO, WHICH IS THE SIGNAL FROM THE EXTERNAL  
18 CRYSTAL.

19 SO WHAT'S THE PURPOSE OF THAT PHASE DETECTOR? BASICALLY  
20 IT'S COMPARING THIS DIVIDED DOWN SIGNAL FROM THE RING  
21 OSCILLATOR AT 20 MEGAHERTZ WITH THIS 20 MEGAHERTZ SIGNAL FROM  
22 THE CRYSTAL AND IT'S TRYING TO LINE UP THOSE SQUARE WAVES TO  
23 TRY TO MAKE SURE THAT THEY ARE WHAT WE CALL IN PHASE. THAT'S  
24 WHY THEY CALL IT A PHASE DETECTOR.

25 NOW, THE REASON THEY DO THAT IS BECAUSE THEY'RE TRYING TO

1 PROVIDE SOME FEEDBACK TO THE RING OSCILLATOR TO GET IT TO GO A  
2 LITTLE FASTER OR A LITTLE SLOWER TO TRY TO KEEP IT AS CLOSE AS  
3 THEY CAN TO 2.0 GIGAHERTZ.

4 BUT IT'S IMPORTANT TO UNDERSTAND THAT THIS 20 MEGAHERTZ  
5 SIGNAL THAT COMES TO THE PHASE DETECTOR, IT'S ACTUALLY A SQUARE  
6 WAVE LIKE WE TALKED ABOUT. IT'S A CLOCK SIGNAL.

7 WHEN IT GETS TO THE PHASE DETECTOR AND IT'S COMPARED WITH  
8 THIS SQUARE WAVE, THERE'S A COMPARISON DONE, BUT NO CLOCK  
9 SIGNAL IS PASSED ON TO THE FILTER. YOU SEE THAT ARROW IS  
10 BLACK. THAT IS NOT A CLOCK SIGNAL. IT'S A VOLTAGE ADJUSTMENT,  
11 AND THAT FILTER ACCUMULATES VOLTAGE ADJUSTMENTS, KIND OF  
12 SMOOTHS THEM OUT, AND THEN PROVIDES ANOTHER VOLTAGE ADJUSTMENT  
13 TO THE RING OSCILLATOR BECAUSE, AS WE DISCUSSED, THE ONLY THING  
14 THE RING OSCILLATOR NEEDS TO OSCILLATE AND GENERATE A CLOCK  
15 SIGNAL IS POWER AND THAT'S THE ONLY INPUT INTO IT.

16 SO THEY MAY TRY TO TELL YOU THAT, "OH, YOU KNOW, WE DO IT  
17 JUST LIKE THE PRIOR ART DID BEFORE CHUCK MOORE'S INVENTION. WE  
18 USE AN EXTERNAL CRYSTAL OSCILLATOR, 20 MEGAHERTZ. IT'S VERY  
19 STABLE, TO MAKE A VERY -- AND WE JUST MULTIPLY IT UP BASICALLY,  
20 TO GET A VERY STABLE RING OSCILLATOR 2.0 GIGAHERTZ."

21 THAT'S NOT TRUE. THIS FREQUENCY, THIS 20 MEGAHERTZ GETS  
22 BLOCKED HERE. IT NEVER GETS PASSED ON TO THE RING OSCILLATOR.  
23 THE ONLY THING THAT GETS PASSED ON IS VOLTAGE ADJUSTMENT TO  
24 ADJUST OR REGULATE THE FREQUENCY OF THE RING OSCILLATOR.

25 BUT THE CLOCK SIGNAL ITSELF IS GENERATED BY THE RING

1 OSCILLATOR. IT IS NOT GENERATED BY THAT EXTERNAL CRYSTAL.

2 I'M JUST CHECKING MY TIME HERE. IT LOOKS LIKE I'M PRETTY  
3 CLOSE.

4 THE COURT: YOU ARE, MR. OTTESON. I WILL GIVE YOU  
5 ONE MINUTE FOR YOUR WRAP UP AND GIVE HTC THE SAME ADDITIONAL  
6 MINUTE.

7 MR. OTTESON: THANK YOU, YOUR HONOR.

8 NOW, WHAT THAT RING OSCILLATOR REALLY IS, LADIES AND  
9 GENTLEMEN, I DON'T KNOW HOW MANY OF YOU HAVE EVER PLAYED A  
10 MUSICAL INSTRUMENT, BUT THEIR RING OSCILLATOR IS LIKE A  
11 METRONOME. WHAT I WAS LEARNING HOW TO PLAY THE PIANO AS A  
12 CHILD, MY PIANO TEACHER MADE ME TRY TO PLAY ALONG AND KEEP UP  
13 WITH THE METRONOME. BUT USUALLY I COULDN'T DO IT.

14 AND SO WHERE WAS THE CLOCK SIGNAL COMING FROM?

15 LET ME BACK UP. THE BEAT TO THE MUSIC WAS BEING CREATED  
16 BY ME. I WAS LIKE THE RING OSCILLATOR. I WAS ACTUALLY  
17 CREATING THE CLOCK SIGNAL. THE METRONOME WAS JUST A REFERENCE,  
18 LIKE A SPEED LIMIT SIGN, WHICH IS ANOTHER ANALOGY.

19 NOW, THE OTHER THING THAT THEY'RE GOING TO TRY TO TELL YOU  
20 IS THAT, LIKE WE SAW HERE, "OUR FREQUENCY IS VERY STABLE, YOU  
21 KNOW, WE DON'T VARY THE FREQUENCY OF OUR PHONES."

22 WELL, I'VE GOT HERE ONE OF HTC'S PHONES THAT THEY PRODUCED  
23 IN THIS CASE.

24 THE COURT: MR. OTTESON, YOUR TIME IS UP.

25 MR. OTTESON: IF I COULD INDULGE THE COURT JUST FOR

1 ONE MORE MINUTE?

2 THE COURT: I'LL GIVE YOU 30 SECONDS AND I'LL GIVE  
3 HTC THE SAME.

4 MR. OTTESON: HERE'S WHAT'S WRONG WITH THEIR  
5 ARGUMENT. THEY SAY THAT THEY DON'T VARY THE FREQUENCY OF THEIR  
6 PHONES.

7 WELL, I'VE GOT ONE HERE AND I DOWNLOADED AN APP -- IF WE  
8 CAN GO TO THE ELMO?

9 NOW, WHAT THIS SHOWS -- YOU CAN'T REALLY SEE IT. I'M GOING  
10 TO BRING IT OVER HERE SO YOU GUYS CAN SEE IT. WHAT IT SHOWS IS  
11 THAT THE CPU FREQUENCY HERE OF THE PHONE IS CHANGING BETWEEN 1  
12 GIGAHERTZ AND .2 GIGAHERTZ. IT'S CONSTANTLY CHANGING.

13 SO FOR THEM TO SAY "WE PRACTICE THE PRIOR ART, OUR CLOCK  
14 SPEED IS VERY STABLE" IS NOT ACCURATE.

15 THE COURT: MR. OTTESON, YOUR TIME IS UP.

16 MR. OTTESON: THANK YOU, YOUR HONOR.

17 THE COURT: THANK YOU, MR. OTTESON.

18 MR. OTTESON: THANK YOU, LADIES AND GENTLEMEN, FOR  
19 YOUR TIME. I APPRECIATE IT.

20 THE COURT: LADIES AND GENTLEMEN, WE'RE GOING TO TAKE  
21 OUR AFTERNOON BREAK AT THIS TIME. FIVE MINUTES FOR YOU TO USE  
22 THE RESTROOM AND STRETCH YOUR LEGS.

23 WHEN WE RETURN WE'LL HEAR FROM HTC AND THEIR OPENING  
24 STATEMENT.

25 (JURY OUT AT 3:16 P.M.)

1 THE COURT: WE'LL SEE YOU BACK HERE IN FIVE MINUTES.

2 MR. OTTESON: THANK YOU, JUDGE.

3 (RECESS FROM 3:16 P.M. UNTIL 3:29 P.M.)

4 (JURY OUT AT 3:29 P.M.)

5 THE COURT: ALL RIGHT. BEFORE WE BRING THE JURY BACK  
6 IN, I JUST WANTED TO CONFIRM ONE DETAIL I DIDN'T FULLY  
7 APPRECIATE BEFORE.

8 MR. RIVERA HAS EXPLAINED THAT THERE'S ACTUALLY A SCREEN  
9 THAT YOU ALL IN THE AUDIENCE CAN SEE AS WELL. IS THAT CORRECT?  
10 AND ARE YOU ALL ABLE TO SEE CLEARLY WHAT'S BEING SHOWN ON THE  
11 SCREEN? YES? DON'T BE SHY.

12 SO AS I UNDERSTAND IT, MS. KEEFE, AND I DIDN'T APPRECIATE  
13 THE POINT YOU WERE MAKING EARLIER, ONLY WHEN CONFIDENTIAL  
14 INFORMATION IS SHOWN ON THIS SIDE WILL THAT SIDE GO DARK.

15 MS. KEEFE: CORRECT, YOUR HONOR.

16 THE COURT: THANK YOU. ALL RIGHT.

17 WITH THAT, MR. RIVERA, COULD YOU BRING THE JURY BACK IN.

18 THE CLERK: YES, YOUR HONOR.

19 THE COURT: I APPRECIATE THAT.

20 MS. KEEFE: TRYING TO DO AS MUCH PUBLIC AS POSSIBLE.

21 THE COURT: I APPRECIATE THAT.

22 (JURY IN AT 3:30 P.M.)

23 THE COURT: LADIES AND GENTLEMEN, BEFORE WE TURN TO  
24 HTC FOR ITS OPENING STATEMENT, LET ME COMPLIMENT YOU ON ONE  
25 THING. I'VE YET TO HAVE A JURY BEFORE TODAY UNDERSTAND THAT WE



1 STAND FOR YOU, SO YOU SHOULD FEEL FREE TO SIT AND STAND AS YOU  
2 LIKE. THIS IS THE FIRST TIME I HAVE HAD TO EXPLAIN THAT, SO  
3 PLEASE CONTINUE TO DO JUST WHAT YOU'VE BEEN DOING ALL  
4 AFTERNOON.

5 IT'S NOW TIME FOR HTC'S OPENING STATEMENT.

6 WITH THAT, AND FOR THAT, I'LL TURN TO HTC.

7 MR. SMITH: THANK YOU, YOUR HONOR.

8 **(MR. SMITH GAVE HIS OPENING STATEMENT ON BEHALF OF THE**  
9 **PLAINTIFFS.)**

10 MR. SMITH: AND THANK YOU, LADIES AND GENTLEMEN, FOR  
11 YOUR TIME AND ATTENTION. I KNOW IT'S VERY LATE IN THE DAY, BUT  
12 I HAVE THE PRIVILEGE OF REPRESENTING HTC IN THIS CASE, ALONG  
13 WITH MY COLLEAGUES, HEIDI KEEFE AND RON LEMIEUX.

14 I ALSO WANT TO INTRODUCE THE COMPANY REPRESENTATIVE,  
15 VINCENT LAM.

16 MR. LAM: GOOD AFTERNOON.

17 MR. SMITH: AND AS MANY OF YOU MAY KNOW, HTC IS A  
18 DESIGNER AND MANUFACTURER OF VERY CUTTING EDGE SMARTPHONES, AND  
19 WE'LL HEAR MORE ABOUT THEM THROUGHOUT MY PRESENTATION AND  
20 THROUGHOUT THIS CASE.

21 BUT I WANT TO GET REALLY TO THE HEART OF THE MATTER VERY  
22 QUICKLY. MR. OTTESON HAD A LOT OF SLIDES AND A LOT OF  
23 INFORMATION, BUT WHAT IS THIS CASE REALLY ABOUT WHEN YOU BOIL  
24 IT DOWN?

25 TPL WANTS MONEY FROM HTC FOR SUPPOSEDLY USING TPL'S

1 TECHNOLOGY IN THEIR PATENT, AND I CAN TELL YOU UNEQUIVOCALLY,  
2 HTC DOES NOT USE THEIR TECHNOLOGY, HAS NEVER USED THEIR  
3 TECHNOLOGY, AND, IN FACT, HAS NO DESIRE TO USE THEIR  
4 TECHNOLOGY.

5 NOW, MR. MOORE AND HIS COLLEAGUE, MR. FISH, AS YOU HEARD  
6 DURING MR. OTTESON'S OPENING STATEMENT, CAME UP WITH SOME  
7 INNOVATIVE CONCEPT. WE AGREE. WE HAVE NO DISAGREEMENT WITH  
8 THAT.

9 BUT YOU'LL HEAR THROUGHOUT THIS CASE THAT NO ONE USES THIS  
10 TECHNOLOGY. IT MAY BE INNOVATIVE, BUT NO ONE USES IT  
11 COMMERCIALY.

12 AND WE DON'T USE IT.

13 AND, IN FACT, TPL DOESN'T USE THEIR OWN TECHNOLOGY.  
14 THAT'S RIGHT. THEY DON'T MAKE A PATENT -- THEY DON'T MAKE A  
15 PRODUCT THAT USES THEIR TECHNOLOGY. THEY'RE WHAT'S CALLED A  
16 NON-PRACTICING ENTITY. WHAT THAT MEANS, IN VERY SIMPLE TERMS,  
17 THEY GO AROUND WITH THEIR PATENTS AND THEY TRY TO LICENSE THEM  
18 FOR MONEY. THEY DON'T MAKE A PRODUCT.

19 HOW ABOUT HTC? WE SPEND MILLIONS EVERY SINGLE YEAR ON  
20 RESEARCH AND DEVELOPMENT TO MAKE CUTTING EDGE PRODUCTS LIKE  
21 THIS PHONE, AND WE'VE BEEN DOING IT FOR YEARS. THIS IS THE  
22 HTC 1. WE'VE BEEN DOING IT FOR YEARS. IN FACT, WE CAME OUT  
23 WITH THE FIRST TOUCH SCREEN PHONE YEARS BEFORE ANYBODY ELSE  
24 DID. THIS IS FOR T-MOBILE.

25 YOU KNOW WHAT OTHER KIND OF COMPANY WE ARE, LADIES AND

1 GENTLEMEN? WE ARE A COMPANY THAT PLAYS BY THE RULES. IF WE  
2 USE SOMEONE ELSE'S IDEAS, WE PAY FOR THEM. WE PLAY FAIRLY.

3 AND WE DIDN'T USE AND WON'T USE TPL'S TECHNOLOGY.

4 AND WHY CAN I STAND BEFORE YOU SO CONFIDENTLY THAT WE  
5 DON'T USE THEIR TECHNOLOGY?

6 WELL, YOU HEARD MR. OTTESON TALK TO YOU ABOUT THE '336  
7 PATENT, AND I LOST COUNT AFTER SIX OR SEVEN TIMES HE SAID IT,  
8 BUT THE '336 PATENT IS ALL ABOUT SPEED, REALLY FAST I THINK  
9 MR. OTTESON SAID, FAST, FAST, FAST, TEN TIMES AS FAST, FIVE  
10 TIMES AS FAST AS ALL THE OTHER MICROPROCESSORS ARE, AND THAT'S  
11 WHAT THE '336 PATENT WAS ALL ABOUT.

12 WELL, SPEED IS FINE.

13 BUT HTC, AS YOU'LL HEAR THROUGHOUT THE COURSE OF THIS  
14 TRIAL, MAKES TRADEOFFS. WE TRADE SPEED ON ONE HAND FOR  
15 RELIABILITY AND CONSISTENCY ON THE OTHER HAND. WE WANT TO MAKE  
16 SURE THAT PHONE WORKS, SO WE DON'T GO AS FAST AS WE CAN.

17 WE ALSO TRADE SPEED FOR BATTERY LIFE. IF YOU GO AS FAST  
18 AS YOU CAN AND YOU'RE CLOCKING THAT CPU VERY FAST, AS  
19 MR. OTTESON WAS SAYING, GUESS WHAT? YOUR BATTERY DRAINS.

20 SO WHAT DO WE DO? WE USE THESE CRYSTALS, AND WE'LL TALK  
21 ABOUT THEM A LITTLE BIT MORE, THAT ARE OFF THE MICROPROCESSOR  
22 TO FIX THE CLOCK SPEED. WE GO STEADY AS YOU CAN. WE DO  
23 EVERYTHING IN OUR POWER TO MAKE SURE WE'RE NOT VARYING.

24 MR. OTTESON DIDN'T TALK ABOUT THIS THAT MUCH, BUT THE  
25 PATENT REQUIRES THAT THE CPU AND THE CLOCK VARY TOGETHER BASED

1 UPON TEMPERATURE, VOLTAGE, AND PROCESS VARIATIONS, AND WE'LL  
2 GET TO THAT IN GREAT DETAIL.

3 BUT WE DO EVERYTHING WE CAN TO MAKE SURE WE STAY STEADY  
4 AND FIXED, NOT FAST AND VARIABLE.

5 AND WHY DO WE DO THAT? WELL, FIRST LET'S GO INTO OUR  
6 TRADEOFFS IN A LITTLE BIT MORE DETAIL.

7 OUR JOB NUMBER ONE FOR HTC AND THEIR PHONES IS TO MAKE  
8 CUSTOMERS HAPPY. AND HOW DO YOU MAKE A CUSTOMER HAPPY? MAKE  
9 SURE THAT HIS PHONE WORKS. MAKE SURE IT WORKS IN HOT  
10 CONDITIONS, COLD CONDITIONS, AND EVERYTHING IN BETWEEN.

11 CAN WE PUT UP THE FIRST SLIDE?

12 AND WE DO THAT BY FIXING THE CPU CLOCK, FIXING THE CPU  
13 SPEED, AND WE SEE IN THE ILLUSTRATION ON THE LEFT-HAND SIDE, IF  
14 YOU'RE IN ALASKA OR YOU'RE IN THE DESERT, WE WANT THIS PHONE TO  
15 WORK AND WE WANT IT TO PERFORM RELIABLY AND CONSISTENTLY IN ALL  
16 CONDITIONS.

17 AND SO WHAT WOULD HAPPEN IF YOU CLOCK THE CPU AS FAST AS  
18 YOU CAN DO, AS FAST AS YOU CAN GO UNDER THE CONDITIONS AND THEN  
19 VARIOUS CONDITIONS, IF IT GETS TOO HOT, FOR EXAMPLE, THE CPU  
20 SLOWS DOWN. CPU'S DON'T LIKE HOT WEATHER.

21 BUT THE PATENT CALLS FOR MAXIMIZING THE CPU SPEED IN ALL  
22 CONDITIONS, AS FAST AS YOU CAN GO IF IT'S HOT, AS FAST AS YOU  
23 CAN GO IF IT'S COLD, AND EVERYTHING IN BETWEEN. AND GUESS WHAT  
24 HAPPENS WHEN YOU DO THAT?

25 WE GO TO THE NEXT SLIDE.

1           YOUR PHONE DOESN'T WORK BECAUSE YOU HAVE THESE VARYING  
2           SPEEDS BECAUSE YOU'RE TRYING TO MAXIMUM IN EVERY CONDITION AND  
3           YOUR PHONE DOESN'T WORK PROPERLY. SO IF YOU'RE TRYING TO CALL  
4           THE BABYSITTER, YOUR HUSBAND, YOUR WIFE, YOUR GIRLFRIEND OR  
5           ANYBODY ELSE, GUESS WHAT HAPPENS? YOUR PHONE DOESN'T WORK  
6           RELIABLY. IT STOPS WORKING.

7           SO THAT'S WHY HTC MAKES A TRADEOFF FOR SPEED, A PURPOSEFUL  
8           TRADEOFF FOR SPEED, INTENTIONAL, TO FIX THIS CLOCK FOR THE CPU  
9           AND NOT GO AS FAST AS WE CAN.

10          IT'S A PRETTY SIMPLE CONCEPT. IF YOU'RE TRYING TO GO AS  
11          FAST AS YOU CAN ALL THE TIME, IF YOU'RE RUNNING AS FAST AS YOU  
12          CAN ALL THE TIME, WE KNOW WHAT HAPPENS. YOU FALL.

13          SAME WITH SMARTPHONES. IF YOU'RE CLOCKING THE CPU WITH  
14          MAX SPEED ALL THE TIME AND THAT SPEED IS VARYING BASED UPON  
15          DIFFERENT CONDITIONS, THAT PHONE WILL CRASH.

16          AND THERE'S ANOTHER REASON WHY HTC SACRIFICES SPEED, FOR  
17          BATTERY LIFE, WHICH IS VERY IMPORTANT TO OUR CUSTOMERS. NOT  
18          SURPRISINGLY, IF YOU'RE CLOCKING THE CPU AS FAST AS YOU CAN GO  
19          AT ALL TIMES, THE BATTERY IS GOING TO DRAIN VERY QUICKLY.

20          IF WE COULD GO TO THE NEXT SLIDE.

21          HERE WE HAVE TWO PHONES SIDE BY SIDE IN GREAT CONDITIONS,  
22          SAY 50 DEGREES, WHICH MEANS THE PROCESSOR, THE CPU CAN RUN VERY  
23          FAST.

24          BUT AT HTC, WE FIX THE CPU SPEED. WE DON'T LET IT RUN AS  
25          FAST AS IT CAN.

1 THE PATENT, HOWEVER, WANTS TO MAXIMIZE THAT CPU SPEED, AND  
2 IF THERE'S GOOD CONDITIONS, THEY CAN EXCEED THE 50 MEGAHERTZ,  
3 IF YOU WILL.

4 CAN WE RUN THE ANIMATION, PLEASE?

5 AND THIS IS WHAT HAPPENS. YOU SEE ON THE LEFT-HAND SIDE  
6 WHEN YOU'RE MAXING YOUR SPEED, YOUR BATTERY LIFE DRAINS  
7 QUICKLY. ON THE RIGHT-HAND SIDE, YOUR BATTERY IS DRAINING, BUT  
8 NOT AS QUICKLY.

9 SO LADIES AND GENTLEMEN, HTC MAKES SPECIFIC TRADEOFFS TO  
10 NOT GO AND USE THE '336 PATENT, BUT INSTEAD USE THE OLDER  
11 TRADITIONAL WAY.

12 WHY? TO MAKE SURE OUR PHONES WORK RELIABLY, CONSISTENTLY,  
13 UNDER ALL CONDITIONS, AND ALSO TO SAVE BATTERY LIFE.

14 AND SO WE TALKED ABOUT WHY WE DON'T USE THEIR TECHNOLOGY,  
15 BUT LET ME TALK TO YOU A LITTLE BIT MORE ABOUT WHAT WE DO  
16 INSTEAD.

17 WHAT WE DO INSTEAD, AND I THINK I MENTIONED THIS, IS WE  
18 USE A FIXED CLOCK, NOT A VARIABLE SPEED CLOCK, TO MAKE SURE  
19 THAT CPU STAYS NICE AND CONSTANT, AS STABLE AS WE CAN GET IT.  
20 THAT'S HOW WE WANT IT.

21 AND HOW DO WE DO THAT?

22 WELL, IF WE COULD GO TO THE NEXT SLIDE, WHICH LOOKS  
23 RELATIVELY FAMILIAR, MR. OTTESON HAD A SIMILAR SLIDE, AND  
24 YOU'LL SEE ON -- HERE'S THE MICROPROCESSOR, THIS CHIP RIGHT  
25 HERE, AND YOU'LL SEE A QUALCOMM NAME ON IT.

1           AND THERE'S THREE DIFFERENT MANUFACTURERS OF OUR CHIPS  
2           THAT ARE AT ISSUE IN THIS CASE, QUALCOMM, TEXAS INSTRUMENTS,  
3           AND ALSO SAMSUNG. THE REASON WHY WE USE THREE SUPPLIERS, IF  
4           YOU WILL, OR THREE DIFFERENT COMPANIES IS TO MAKE SURE WE HAVE  
5           A STEADY SUPPLY OF CHIPS, AND ALSO FOR PRICE COMPETITION.

6           AND SO WHAT'S IN THIS MICROPROCESSOR? THE PLL, AND WE'LL  
7           TAKE A CLOSER LOOK AT THAT, MR. OTTESON TALKED A LOT ABOUT IT,  
8           AND THE CPU. THE CPU IS ON THE SAME CHIP. YOU'LL HEAR A LOT  
9           ABOUT ON-CHIP, OFF-CHIP, AND THE CHIP THAT THEY'RE REFERRING TO  
10          IS THIS MICROPROCESSOR.

11          AND IF WE COULD GO TO THE NEXT SLIDE, PLEASE.

12          YOU'LL SEE THIS IS JUST A BLOW UP OF THE MICROPROCESSOR,  
13          AND ON THE LEFT-HAND SIDE, MR. OTTESON TALKED ABOUT THIS A  
14          LITTLE BIT, IS THE EXTERNAL CRYSTAL CLOCK. IT'S EXTERNAL TO  
15          THE MICROPROCESSOR.

16          AND SO HOW DO OUR HTC PHONES WORK? WELL, THEY ALL  
17          GENERALLY WORK THE SAME WITH THESE CHIPS, WHETHER THEY'RE  
18          QUALCOMM OR TEXAS INSTRUMENTS OR THEY'RE SAMSUNG, AND HERE'S  
19          HOW IT WORKS.

20          THE CRYSTAL STARTS THE ENGINE, IF YOU WILL. EVERYTHING  
21          STARTS RIGHT HERE.

22          WE CAN PLAY THE ANIMATION, PLEASE.

23          AND YOU'LL SEE WHAT IS CALLED A CLOCK SIGNAL, OR A  
24          REFERENCE SIGNAL, AND IT GOES TO THE PLL, WHICH IS CALLED THE  
25          PHASE LOCK LOOP, AND I'LL GET TO THAT IN A MINUTE, AND THEN THE

1 CLOCK SIGNAL COMES OUT OF THE PLL TO CLOCK THE CPU -- AND THIS  
2 IS VERY IMPORTANT, LADIES AND GENTLEMEN -- RIGHT HERE IS THE  
3 CLOCK SIGNAL, THIS SIGNAL THAT COMES OUT OF THE PLL, AND YOU'LL  
4 HEAR A LOT OF TESTIMONY THROUGHOUT THE WEEK ABOUT IT, AND WHEN  
5 THEY SAY CLOCKING THE CPU OR THE CLOCK SIGNAL, THIS IS WHAT  
6 THEY'RE TALKING ABOUT.

7 AND SO HOW DOES THE PLL AND THE EXTERNAL CRYSTAL CLOCK  
8 WORK? WELL, THEY'RE IN A LOOP, A PHASE LOCK LOOP, AND THEY'RE  
9 LOCKED. THEY WANT TO MAKE SURE THIS STAYS AS STEADY AS  
10 POSSIBLE SO THAT WE DON'T VARY. WHATEVER THE CONDITION, THE  
11 PVT CONDITIONS THAT MR. OTTESON MENTIONED, PROCESSOR,  
12 TEMPERATURE, OR VOLTAGE, WE DON'T WANT TO VARY. WE DO  
13 EVERYTHING IN OUR POWER TO MAKE SURE IT STAYS FIXED BECAUSE WE  
14 USE A PHASE LOCK LOOP AND A CRYSTAL.

15 AND NOW WHAT WOULD HAPPEN, LADIES AND GENTLEMEN, IF YOU  
16 TOOK OUT THIS CRYSTAL CLOCK? MR. OTTESON SAID IT WOULD WORK.

17 WELL, YOU'LL HEAR TESTIMONY, DON'T TAKE MY WORD FOR IT,  
18 YOU'LL HEAR TESTIMONY THROUGHOUT THIS CASE FROM QUALCOMM  
19 ENGINEERS, FROM TEXAS INSTRUMENTS FELLOWS THAT IF YOU TAKE THIS  
20 CRYSTAL CLOCK OUT, THERE WILL BE NO CLOCK SIGNAL. THIS CLOCK  
21 SIGNAL AND THAT PROCESSOR WILL NOT WORK WITHOUT THAT CRYSTAL.

22 MR. OTTESON CALLED IT A METRONOME, OR IT JUST HELPS BUFFER  
23 THE CLOCK SIGNAL.

24 NO. THIS IS CRITICAL TO GENERATE THIS CLOCK SIGNAL.

25 AND MR. OTTESON ALSO HAD A SLIDE WHERE HE FOCUSSED ON A



1 PORTION OF THE PHASE LOCK LOOP. HE TALKED ABOUT THE RING  
2 OSCILLATOR, IF YOU REMEMBER THAT.

3 AND THE RING OSCILLATOR, YOU'LL HEAR FROM MR. MOORE  
4 HIMSELF, POSSIBLY TOMORROW GIVEN THE LATE HOUR, BUT YOU'LL HEAR  
5 FROM MR. MOORE HIMSELF, HE DIDN'T INVENT THE RING OSCILLATOR.  
6 THE RING OSCILLATOR HAS BEEN AROUND FOR A LONG TIME.

7 MR. OTTESON ALSO SAID THAT THE RING OSCILLATOR CLOCKS THE  
8 CPU, AND HE HAD A FORMULA. REMEMBER THAT FORMULA ON THE  
9 BOTTOM?

10 WELL, THAT'S NOT THE FORMULA THAT DEFINES THE CLOCK  
11 SIGNAL.

12 PAY VERY CLOSE ATTENTION. IF YOU REMEMBER ANYTHING FROM  
13 THESE OPENING STATEMENTS, PAY VERY CLOSE ATTENTION TO THE  
14 FORMULA THAT DEFINES THIS CLOCK SIGNAL HERE. IT'S A RECIPE. I  
15 DON'T PARTICULARLY LIKE FORMULAS, BUT IT'S A RECIPE AND THERE'S  
16 NECESSARY INGREDIENTS TO MAKE THIS CLOCK SIGNAL.

17 AND WHAT'S ONE OF THE CRITICAL -- WHAT'S THE FIRST  
18 INGREDIENT? THIS SIGNAL, THIS CRYSTAL REFERENCE IS A NECESSARY  
19 INGREDIENT TO MAKE THIS CLOCK SIGNAL. WITHOUT IT, IT WON'T  
20 WORK.

21 AND SO WHILE MR. OTTESON IS FOCUSING ON THE RING  
22 OSCILLATOR, THIS CLOCK SIGNAL IS GOVERNED BY ITS FORMULA.

23 SO PAY CLOSE ATTENTION THROUGHOUT THIS TRIAL, LISTEN TO  
24 THE EXPERTS, LISTEN TO THE MANUFACTURERS, AND THEY'LL ALL POINT  
25 YOU TO A FORMULA THAT INCLUDES THAT CRYSTAL REFERENCE CLOCK.

1 IT HAS TO BE THERE.

2 NOW, MR. OTTESON TALKED ONLY A LITTLE BIT ABOUT THE PATENT  
3 ITSELF, AND I THINK IT'S IMPORTANT FOR US TO REALLY TAKE A LOOK  
4 AT THE PATENT IN A LITTLE BIT OF DETAIL.

5 IF WE CAN GO TO THE FIRST SLIDE.

6 HERE'S THE FRONT OF THE PATENT, AND YOU'LL RECALL THIS  
7 FIGURE. MR. OTTESON TALKED ABOUT THAT A LOT.

8 BUT DID YOU NOTICE, HE DIDN'T EVEN MENTION THE NAME OF THE  
9 PATENT, HIGH PERFORMANCE MICROPROCESSOR HAVING A VARIABLE SPEED  
10 SYSTEM CLOCK. THE CLOCK HAS TO VARY.

11 AND WHAT DOES IT VARY BASED ON? TEMPERATURE, VOLTAGE, AND  
12 PROCESS. TEMPERATURE, VOLTAGE, AND PROCESS.

13 AND WHY IS THAT IMPORTANT? WELL, AT THE TIME MR. MOORE  
14 AND MR. FISH WERE COMING UP WITH THEIR INVENTION, AND EVEN  
15 TODAY, MICROPROCESSORS, AS MR. OTTESON MENTIONED, WERE AFFECTED  
16 BY TEMPERATURE, HEAT, COLD, AND OTHER ENVIRONMENTAL CONDITIONS.

17 AND SO THE PATENT INVENTORS SAID, "WELL, WE DON'T LIKE HOW  
18 THE TRADITIONAL WAY IS ADDRESSING THESE CONDITIONS."

19 AND WHAT WAS THE TRADITIONAL WAY OF DOING THIS? WELL, THE  
20 TRADITIONAL WAY OF CLOCKING THE CPU WAS USING A CRYSTAL JUST  
21 LIKE HTC DOES, EXACTLY LIKE HTC DOES.

22 AND YOU KNOW HOW THEY DID THAT? THEY WOULD SET THE CLOCK  
23 FOR THE WORST CONDITION, THE HOTTEST CONDITION, FOR EXAMPLE, OR  
24 THE LOWEST COMMON DENOMINATOR.

25 WHAT DOES ALL THAT JARGON MEAN? WELL, IT'S PRETTY SIMPLE.

1 IF YOU WANT THE PHONE TO OPERATE WHEN IT'S 0 DEGREES OR 110  
2 DEGREES, 110 DEGREES IS GOING TO BE THE WORST CONDITION BECAUSE  
3 THE CPU IS GOING TO SLOW DOWN, IT DOESN'T LIKE HEAT. SO YOU  
4 LOOK AT THE CLOCK SPEED AT THAT 110 DEGREES AND YOU FIX IT AT  
5 THAT POINT. BECAUSE YOU KNOW WHY? YOU GUARANTEE THAT IT WORKS  
6 BELOW THAT TEMPERATURE.

7 I LIKE TO THINK ABOUT IT IN TERMS OF I LIVE ABOUT TWO  
8 MILES FROM THE SUPERMARKET AND IT'S ALL STRAIGHTAWAYS WHERE I  
9 CAN GO 40 MILES AN HOUR IF I'M DRIVING WITHIN THE SPEED LIMIT,  
10 AND THERE'S A BIG TURN, IT'S A 20 MILE AN HOUR HAIRPIN TURN.

11 AND SO I CAN START OFF FROM MY HOUSE AND GO 20 MILES AN  
12 HOUR THE ENTIRE WAY AND GUARANTEE THAT I WOULD MAKE IT AROUND  
13 THAT TURN.

14 BUT I LEAVE SPEED ON THE ROAD, IF YOU WILL. I WOULDN'T BE  
15 GOING AS FAST AS I CAN LIKE THE PATENT SAYS I WANT TO, LIKE I  
16 SHOULD.

17 AND THAT'S WHAT MR. MOORE AND MR. FISH DIDN'T LIKE. THEY  
18 DIDN'T WANT YOU TO GO SLOW. THEY WANTED YOU TO GO AS FAST AS  
19 YOU CAN.

20 AND SO WHAT DID THEY COME UP WITH? WELL, LADIES AND  
21 GENTLEMEN -- IF WE CAN GO TO THE NEXT SLIDE -- THEY CAME UP  
22 WITH, AS MR. OTTESON SAID, THIS TWO CLOCK SYSTEM, AND THIS  
23 FIRST CLOCK WAS JUST THIS I/O, IN/OUT INTERFACE, WHICH IT JUST  
24 RECEIVES AND EXCHANGES DATA WITH EVERYTHING OFF THE CHIP.

25 SO IF WE CAN WHITE THIS OUT, BECAUSE THIS IS REALLY WHAT

1 THE INVENTORS WERE FOCUSED ON.

2 HERE IT IS. REMEMBER THE RING OSCILLATOR VARIABLE SPEED  
3 CLOCK, AND THAT CLOCKS THE CPU.

4 AND YOU NOTICE IT'S ON THE CHIP. WHY IS THAT IMPORTANT?

5 WELL, THE WAY THIS WORKS IS IF THIS CHIP HEATS UP BECAUSE  
6 YOU'RE OUTSIDE ON A HOT DAY IN THE SUMMER, IT'S 95 DEGREES,  
7 THEN THIS WILL SLOW DOWN A LITTLE BIT, BUT IT'LL GO AS FAST AS  
8 IT CAN TO CLOCK THE CPU.

9 IF YOU COME INSIDE AND MAYBE THE COURTROOM IS FREEZING IN  
10 HERE, TEMPERATURE'S TURNED WAY DOWN LOW, WELL, THIS WILL START  
11 TO RUN A LITTLE QUICKER BECAUSE THE CONDITIONS ARE BETTER AND  
12 IT'LL CLOCK THE CPU FASTER.

13 THAT'S WHY IT'S A VARIABLE SPEED CLOCK. DEPENDING UPON  
14 THE CONDITIONS, IT'LL VARY. BUT IT'S ALWAYS TRYING TO MAXIMIZE  
15 THAT SPEED, AS FAST AS YOU CAN GO.

16 NOW, WHAT'S VERY INTERESTING IS YOU'LL NOTICE, OUR  
17 PRODUCTS HAD A CRYSTAL OVER HERE. OUR PRODUCTS HAD A PLL.

18 THERE'S NO PLL HERE. THERE'S NO CRYSTAL IN MR. MOORE AND  
19 MR. FISH'S INVENTION BECAUSE THEY DID NOT WANT TO GO -- THEY  
20 DID NOT WANT TO GO AT A FIXED SPEED. THEY DID NOT WANT TO GO  
21 STEADY LIKE HTC. NO. THEIR WHOLE POINT OF THEIR INVENTION IS  
22 GO AS FAST AS YOU CAN UNDER THE INVENTION, SPEED, SPEED, SPEED.  
23 YOU HEARD MR. OTTESON, REALLY FAST, REALLY FAST. THAT'S WHAT  
24 THEY WANTED TO DO.

25 WELL, THAT'S THEIR INVENTION, AND YOU'LL HEAR FROM

1 MR. MOORE PERSONALLY TOMORROW THAT HE DIDN'T -- THAT HIS  
2 INVENTION DID NOT INCLUDE CRYSTALS. HIS INVENTION DID NOT  
3 INCLUDE PLL'S. HIS INVENTION DID NOT INCLUDE FIXED CLOCKS.

4 AND YOU'LL HEAR FROM MR. FISH -- UNFORTUNATELY, YOU'RE  
5 GOING TO HAVE TO HEAR HIM BY VIDEOTAPE -- AND YOU'RE GOING TO  
6 HAVE TO HEAR HIM LATER IN THE WEEK THROUGH OUR CASE WHEN WE GO  
7 SECOND, AND WE'LL TALK ABOUT THAT IN A MINUTE, BUT YOU'LL HEAR  
8 FROM MR. FISH WHO'LL TELL YOU THE SAME THING.

9 AND YOU KNOW WHAT THEY CALLED THIS CLOCK RIGHT HERE? THEY  
10 REFERRED TO IT AS A FREE RUNNING CLOCK. NO CONTROL. NO  
11 CRYSTAL. NO PLL. FREE RUNNING CLOCK. THAT'S WHAT THEY CAME  
12 UP WITH.

13 SO WHERE DOES THAT LEAVE US, LADIES AND GENTLEMEN?

14 WELL, THAT LEAVES US BACK REALLY WHERE WE STARTED, THAT WE  
15 DON'T USE THIS TECHNOLOGY. WE DON'T WANT TO USE THIS  
16 TECHNOLOGY. WE DO EVERYTHING WE CAN NOT TO USE THIS  
17 TECHNOLOGY. WE USE A CRYSTAL NOT TO VARY, BUT TO MAKE THIS  
18 STAY STEADY SO OUR PHONES WORK PROPERLY, AND TO PRESERVE  
19 BATTERY LIFE. WE DO THE EXACT OPPOSITE OF THE PATENT.

20 AND SO YOU'LL HEAR FROM OUR WITNESSES, YOU'LL HEAR FROM  
21 WITNESSES FROM QUALCOMM, AND YOU'LL HEAR FROM WITNESSES FROM  
22 TEXAS INSTRUMENTS AND THEY'LL TELL YOU THE SAME THING AND  
23 THEY'LL TELL YOU HOW OUR PRODUCTS WORK.

24 AND LET ME GET INTO THAT IN A LITTLE BIT MORE DETAIL.

25 THE WAY THIS WORKS IS THAT TPL'S WITNESSES WILL GO FIRST

1 AND YOU'LL HEAR FROM THEM FOR SEVERAL DAYS, SO PLEASE KEEP AN  
2 OPEN MIND AND WAIT FOR OUR WITNESSES TO TESTIFY TO TELL YOU OUR  
3 STORY, AND THEY'RE GOING TO BE LATER IN THE WEEK, THEY MAY BE  
4 EVEN INTO THE FOLLOWING WEEK ON IN THE MONDAY OR TUESDAY.

5 AND WHO ARE YOU GOING TO HEAR FROM? WELL, FIRST YOU'RE  
6 GOING TO HEAR FROM MR. MARTIN FICHTER, WHO'S THE HTC  
7 VICE-PRESIDENT OF PRODUCT AND OPERATIONS. HE'S GOING TO TELL  
8 YOU WHY WE MAKE THESE TRADEOFFS, SPEED FOR BATTERY LIFE, SPEED  
9 FOR DEPENDABILITY AND CONSISTENCY AND RELIABILITY, MAKING SURE  
10 THAT THE PHONE WORKS.

11 AND THEN YOU'LL HEAR FROM MR. EDWARD LIANG, WHAT'S THE HTC  
12 MANAGER OF THE COMPUTING LAB IN TAIWAN FOR HTC. AND MR. LIANG  
13 IS THE ONE WHO ACTUALLY PICKS OUT THE CHIPS THAT THE PHONES ARE  
14 GOING TO USE. HE PICKS OUTSIDE THE MICROSOFT -- EXCUSE ME --  
15 THE QUALCOMM CHIPS, FOR EXAMPLE. AND HE'LL TELL YOU WHY HE  
16 REQUIRES THEM TO BE FIXED, DOESN'T WANT THEM TO BE FREE RUNNING  
17 LIKE THE '336 PATENT.

18 AND THEN YOU'LL HEAR FROM SINA DENA, A QUALCOMM SENIOR  
19 ENGINEER. HE'S THE MAN RESPONSIBLE FOR THE QUALCOMM PRODUCTS.  
20 AND YOU KNOW WHAT HE'LL TELL YOU? HE'LL TELL YOU THAT IF YOU  
21 TAKE OUT THE CRYSTAL -- REMEMBER I WAS POINTING TO THE CRYSTAL  
22 A LITTLE BIT EARLIER -- IF YOU TAKE OUT THE CRYSTAL, THE PHONE  
23 WON'T WORK. IF YOU TAKE OUT THE CRYSTAL, THE PHONE WON'T BE  
24 CLOCKED, THE CPU WON'T BE CLOCKED.

25 AND HE'LL ALSO SHOW YOU THE FORMULA. REMEMBER I TALKED TO

1 YOU ABOUT THE FORMULA FROM THE CLOCK SIGNAL?

2 IF WE COULD GO BACK, JIM, TO THE SLIDE WITH THE  
3 MICROPROCESSOR?

4 MR. DENA WILL SHOW YOU THAT FORMULA. HE'LL WALK YOU  
5 THROUGH THAT THE REFERENCE SIGNAL RIGHT HERE THAT IS REQUIRED  
6 TO MAKE THIS SIGNAL. THIS IS A NECESSARY INGREDIENT FOR THE  
7 RECIPE OF THAT CLOCK SIGNAL. SO PLEASE, HE'S NOT GOING TO  
8 TESTIFY FOR YOU FOR A FEW DAYS, BUT REMEMBER TO LISTEN TO HIS  
9 TESTIMONY.

10 IF WE COULD GO BACK TO THE WITNESS SLIDE, JIM? THANK YOU.  
11 AND FINALLY -- THEN YOU'RE GOING TO HEAR FROM OUR EXPERTS,  
12 MR. TOM GAFFORD AND MR. CHRIS BOKHART.

13 AND MR. GAFFORD IS OUR TECHNICAL EXPERT AND HE'S GOING TO  
14 SHOW YOU HOW THESE PRODUCTS WORK. HE'S GOING TO TELL YOU IN  
15 VERY SIMPLE TERMS. AND WHO'S MR. TOM GAFFORD?

16 WELL, WE CAN GO TO THE NEXT SLIDE. HE'S AN ELECTRICAL  
17 ENGINEER AND HE'S A HANDS ON GUY. HE'S BEEN IN SILICON VALLEY  
18 FOR 40 YEARS. HE'S THE INVENTOR OF FOUR PATENTS AND HE'S A  
19 SERIAL ENTREPRENEUR. AT TEN YEARS OLD, HE WAS REPAIRING  
20 TELEVISIONS AND RADIOS, AND BY HIS TEENS, HE WAS MAKING A HAM  
21 RADIO WITH CLOCKS SIMILAR TO WHAT WE HAVE TODAY. HE FOUNDED A  
22 START-UP AND HE BUILT ROBOTS AT STANFORD, AND HE'S CONSULTED  
23 FOR A NUMBER OF DIFFERENT COMPANIES.

24 AND WHAT HE WILL GIVE YOU, WHAT MR. GAFFORD WILL GIVE YOU  
25 WILL BE A MAN IN THE INDUSTRY POINT OF VIEW OF HOW THESE THINGS

1 WORK AND WHY THEY DO.

2 AND THEN FINALLY, LADIES AND GENTLEMEN, YOU'LL HEAR FROM  
3 MR. BOKHART.

4 IF WE COULD GO TO THE NEXT SLIDE?

5 MR. BOKHART'S AN INTELLECTUAL PROPERTY VALUATION EXPERT.  
6 WHAT DOES THAT MEAN IN SIMPLE TERMS? HE'S GOING TO ADDRESS  
7 IT -- IF THERE'S ANY DAMAGES IN THIS CASE, HE'LL ADDRESS THAT.  
8 WE DON'T THINK THERE SHOULD BE BECAUSE WE DON'T INFRINGE. WE  
9 DON'T USE THEIR TECHNOLOGY. BUT HE WILL ADDRESS THOSE ISSUES.

10 AND HE WILL ALSO ADDRESS, LADIES AND GENTLEMEN -- REMEMBER  
11 THAT SLIDE, I THINK IT WAS THE FIRST SLIDE THAT MR. OTTESON PUT  
12 UP WITH ALL THE LOGOS OF THE COMPANIES THAT WERE COMING IN ON  
13 THE SIDE OF THE SCREEN? MR. BOKHART WILL ALSO ADDRESS THOSE  
14 LICENSES. HE'LL TELL YOU THAT TPL TRIED TO LICENSE OVER 800  
15 COMPANIES AND GOT 100 LICENSES.

16 HE WILL ALSO -- OR YOU WILL ALSO HEAR, LADIES AND  
17 GENTLEMEN, THROUGH THE COURSE OF THIS CASE -- OR I SHOULD SAY  
18 YOU WON'T HEAR THROUGH THE COURSE OF THIS CASE NOT A SINGLE  
19 WITNESS FROM ANY OF THOSE COMPANIES THAT MR. OTTESON PUT UP.  
20 REMEMBER, I THINK THERE WAS APPLE, SONY, AND A BUNCH OF OTHERS,  
21 NOKIA. YOU WON'T HEAR FROM A SINGLE WITNESS FROM THOSE  
22 COMPANIES WHO SAY THEY ACTUALLY USE THIS INVENTION.

23 BUT YOU'LL HEAR TESTIMONY, YOU'LL HEAR EVIDENCE WHY  
24 PEOPLE, COMPANIES, TAKE LICENSES FOR TECHNOLOGY THEY DON'T USE.  
25 SOMETIMES IT'S CHEAPER TO TAKE THE TECHNOLOGY, THE LICENSE,



1        THAN IT IS TO PAY THE LAWYERS.

2                AND SO YOU'LL HEAR FROM MR. BOKHART AND YOU'LL HEAR FROM  
3        OTHERS ON THESE ISSUES.

4                AND SO, LADIES AND GENTLEMEN, I WANT TO END BY THANKING  
5        YOU FOR YOUR TIME AND ATTENTION IN THIS CASE.

6                AND I ALSO WANT TO BRING THIS CASE BACK TO REALLY WHAT  
7        IT'S ABOUT. IT'S ABOUT A PATENT.

8                AND WHAT DOES THE PATENT REQUIRE? WHAT ARE THE BOUNDS, AS  
9        THE JUDGE SAID, WHAT ARE THE BOUNDS OF THIS PATENT?

10                WELL, THIS PATENT REQUIRES TWO THINGS THAT YOU NEED TO  
11        KEEP IN MIND AS YOU LOOK AT THE EVIDENCE, AS YOU LISTEN TO THE  
12        TESTIMONY.

13                THIS PATENT REQUIRES A VARIABLE SPEED CLOCK ON THE CHIP,  
14        ON THE MICROPROCESSOR TO CLOCK THE CPU, AND THERE'S REALLY TWO  
15        REQUIREMENTS, SO PLEASE KEEP THESE IN MIND THROUGHOUT THE WEEK,  
16        WEEK AND A HALF WE'RE HERE, AND KEEP THESE QUESTIONS IN THE  
17        FOREFRONT OF YOUR MIND WHEN YOU'RE LOOKING AT ALL THE EVIDENCE  
18        AND YOU'RE LISTENING TO THE TESTIMONY.

19                FIRST, WHAT DOES IT REQUIRE? A CPU SPEED HAS TO VARY  
20        BASED UPON ENVIRONMENTAL CONDITIONS LIKE TEMPERATURE. IT HAS  
21        TO VARY. NOT MAY. IT HAS TO VARY.

22                AND YOU KNOW WHAT, LADIES AND GENTLEMEN? WE DO EVERYTHING  
23        IN OUR POWER NOT TO VARY BECAUSE WE WANT TO PRESERVE THE  
24        BATTERY LIFE AND MAKE SURE OUR PHONES WORK.

25                REMEMBER THE SLIDE ABOUT THE IGLOO AND THE DESERT? WE

1 WANT TO MAKE SURE OUR PHONES WORK IN THESE CONDITIONS AND  
2 EVERYTHING IN BETWEEN. WE DON'T VARY BASED UPON TEMPERATURE  
3 AND OTHER ENVIRONMENTAL CONDITIONS.

4 AND THE SECOND REQUIREMENT OF THIS PATENT THAT YOU SHOULD  
5 KEEP IN THE FOREFRONT OF YOUR MIND IS EVERYTHING NEEDED TO  
6 GENERATE THE CLOCK SIGNAL HAS TO BE ON THE MICROPROCESSOR.

7 IF WE COULD GO BACK TO THE MICROPROCESSOR SLIDE, JIM,  
8 PLEASE?

9 WHAT DOES THAT MEAN? EVERYTHING TO MAKE THIS SIGNAL, ALL  
10 THE INGREDIENTS HAVE TO BE ON THIS MICROPROCESSOR.

11 WELL, WE KNOW -- DON'T TAKE MY WORD FOR IT -- WE KNOW BY A  
12 FORMULA, THERE'S A FORMULA, A RECIPE HOW TO MAKE THIS CLOCK  
13 SIGNAL, AND IT TELLS YOU THAT YOU MUST HAVE THAT CRYSTAL. NOT  
14 MAY OR IT'S OPTIONAL. YOU MUST.

15 SO THERE'S NO WAY THAT EVERYTHING ON THAT MICROPROCESSOR  
16 NEEDED TO GENERATE THIS SIGNAL IS HERE BECAUSE THE FORMULA  
17 REQUIRES THIS CRYSTAL.

18 AND SO, LADIES AND GENTLEMEN, I'M GOING TO END MY REMARKS  
19 BY AGAIN THANKING YOU. I KNOW IT'S LATE IN THE DAY AND YOU  
20 PROBABLY DIDN'T THINK YOU'D BE HERE FOR A PATENT INFRINGEMENT  
21 TRIAL WHEN YOU STARTED YOUR MORNING, BUT WE THANK YOU VERY MUCH  
22 AND WE'RE CONFIDENT THAT AT THE END OF THE CASE THAT YOU WILL  
23 SEE OUR POINT OF VIEW AND RETURN A VERDICT OF NON-INFRINGEMENT.

24 AND THANK YOU SO MUCH.

25 THE COURT: MR. SMITH, THANK YOU, SIR.

1 MR. SMITH: THANK YOU, YOUR HONOR.

2 THE COURT: MR. OTTESON, YOU MAY CALL YOUR FIRST  
3 WITNESS.

4 MR. OTTESON: THANK YOU, YOUR HONOR.

5 DEFENDANTS CALL CHARLES H. MOORE.

6 THE COURT: MR. MOORE, BEFORE YOU TAKE THE WITNESS  
7 STAND, I WILL NEED TO HAVE YOU SWORN, SIR.

8 MR. RIVERA, WOULD YOU PLEASE SWEAR THE WITNESS?

9 THE CLERK: RAISE YOUR RIGHT HAND, PLEASE.

10 **(CHARLES H. MOORE, DEFENDANTS' WITNESS, WAS SWORN.)**

11 THE WITNESS: I DO.

12 THE CLERK: THANK YOU. PLEASE BE SEATED.

13 PLEASE STATE YOUR FULL NAME AND SPELL YOUR LAST NAME FOR  
14 THE RECORD.

15 PROSPECTIVE JUROR: CHARLES H. MOORE, M-O-O-R-E.

16 THE COURT: MR. OTTESON, YOU MAY PROCEED.

17 MR. OTTESON: THANK YOU, YOUR HONOR.

18 **DIRECT EXAMINATION**

19 BY MR. OTTESON:

20 Q. MR. MOORE, GOOD AFTERNOON.

21 ARE YOU CURRENTLY EMPLOYED?

22 A. YES.

23 Q. AND WHAT IS YOUR CURRENT JOB THAT YOU HAVE NOW?

24 A. I'M THE CHIEF TECHNOLOGY OFFICER OF GREENARRAYS,  
25 INCORPORATED, AND THE CHAIRMAN OF THEIR BOARD OF DIRECTORS.

1 Q. SO BEFORE WE TALK ABOUT YOUR PARTICULAR RESPONSIBILITIES  
2 AT GREENARRAYS, WHAT IS THE GENERAL BUSINESS OF GREENARRAYS?

3 A. WE MAKE MULTICORE COMPUTER CHIPS. THAT IS A CHIP WITH  
4 MULTIPLE COMPUTERS ON IT.

5 Q. AND WHAT IS THE CHIP THAT GREENARRAYS IS CURRENTLY WORKING  
6 ON?

7 A. IT'S CALLED THE GA144. IT'S A FIVE MILLIMETER DIE WITH  
8 144 COMPUTERS.

9 Q. SO WHAT WE'RE LOOKING AT ON THE SCREEN HERE, CAN YOU TELL  
10 US WHAT THAT IS?

11 A. THAT'S THE PACKAGE THAT THE CHIP IS INSIDE, AND ALL THOSE  
12 LETTERS ARE REQUIRED IN ORDER TO DESCRIBE ACCURATELY WHAT IT  
13 IS.

14 Q. AND SO THIS KIND OF BLACK PACKAGING YOU SAY IS NOT THE  
15 CHIP ITSELF?

16 A. NO. THAT'S A PLASTIC PACKAGE THAT INCORPORATES THE CHIP.

17 Q. OKAY. AND I BELIEVE YOU SAID THAT THE GREENARRAYS 144 HAS  
18 MULTIPLE COMPUTERS OR CORES. HOW MANY DOES IT HAVE?

19 A. IT HAS 144 SMALL COMPUTERS. THEY HAVE TO BE SMALL IN  
20 ORDER TO FIT IN THE FIVE MILLIMETER DIE.

21 Q. YEAH, I'LL BET.

22 IS THE GA144 WHAT YOU WOULD CALL A MICROPROCESSOR?

23 A. YES.

24 Q. SO TELL US, MAYBE YOU CAN EXPLAIN FOR THE JURY JUST  
25 GENERALLY WHAT A MICROPROCESSOR IS.

1 A. A MICROPROCESSOR IS THE BRAINS OF A COMPUTER SYSTEM. IT  
2 EXECUTES INSTRUCTIONS SEQUENTIALLY AND DOES ALL OF THE WORK  
3 THAT THE COMPUTER IS REQUIRED TO DO. IT DOES CALCULATIONS, IT  
4 MOVES DATA FROM PLACE TO PLACE, IT CONTROLS PERIPHERALS,  
5 PERIPHERALS THAT ARE ATTACHED TO IT.

6 Q. SO LET ME -- LET ME SEE IF I CAN ASK YOU ABOUT AN EXAMPLE  
7 THAT MIGHT GIVE A MORE, A LITTLE MORE LIFE TO THE DESCRIPTION.

8 MY DAUGHTER LIKES TO GET MY IPAD ONCE IN A WHILE AND PLAY  
9 A GAME ON THERE THAT'S CALLED TEMPLE RUN, AND IT DISPLAYS VIDEO  
10 AND DOES VARIOUS THINGS.

11 CAN YOU DESCRIBE FOR THE JURY WHAT IT IS THAT THE  
12 MICROPROCESSOR DOES THAT ENABLES SOMETHING -- THAT ENABLES MY  
13 DAUGHTER TO BE ABLE TO PLAY THAT GAME ON MY IPAD?

14 A. WELL, THE IPAD HAS A NUMBER OF CHIPS IN IT. ONE OF THEM  
15 WOULD BE THE MICROPROCESSOR. ANOTHER WOULD BE A VIDEO DISPLAY  
16 UNIT THAT DISPLAYS, THAT GENERATES THE PICTURE. ANOTHER WOULD  
17 BE A KEYBOARD THAT ACCEPTS INPUTS FROM A TOUCH SCREEN PERHAPS.

18 AND ALL THESE DEVICES HAVE TO BE MONITORED AND CONTROLLED  
19 AND THAT'S DONE BY THE MICROPROCESSOR.

20 Q. OKAY. VERY GOOD. THANK YOU.

21 SO LET'S GO BACK AND TALK ABOUT GREENARRAYS A LITTLE BIT.  
22 WHAT, IN GENERAL, ARE YOUR RESPONSIBILITIES AS THE CHAIRMAN AND  
23 CHIEF TECHNOLOGY OFFICER OF GREENARRAYS?

24 A. AS CHAIRMAN, I JUST RUN BOARD MEETINGS LIKE ALL OTHER  
25 CHAIRMEN.

1 AS TECHNOLOGY OFFICER, I OVERSEE THE DEVELOPMENT OF OUR  
2 CHIPS AND THE IMPROVEMENT OF THE TECHNOLOGY THEY CONTAIN.

3 Q. OKAY. SO YOU MENTIONED THE GA144 CHIP THAT GREENARRAYS IS  
4 WORKING ON NOW.

5 MAYBE YOU COULD TELL US WHAT, IF ANYTHING, MAKES  
6 GREENARRAYS' MICROPROCESSOR CHIPS UNIQUE OR DIFFERENT FROM  
7 OTHER MICROPROCESSORS.

8 A. IT'S A REMARKABLE CHIP. FIRST, THE FACT THAT IT HAS 144  
9 COMPUTERS THAT CAN RUN IN PARALLEL. THIS GIVES IT ABSOLUTELY  
10 UNPRECEDENTED COMPUTATIONAL ABILITY. WE CAN EXECUTE 96,000  
11 MIPS ON THIS CHIP.

12 Q. WHAT DOES THAT MEAN WHEN YOU SAY THAT YOU CAN EXECUTE  
13 96,000 MIPS? PLEASE EXPLAIN FOR THE JURY WHAT THAT MEANS.

14 A. A MODERN PENTIUM COMPUTER CAN EXECUTE ABOUT 3,000 MIPS,  
15 THAT'S ABOUT 3 GIGAHERTZ, SO WE'RE RUNNING ABOUT 30 TIMES AS  
16 FAST AS A PENTIUM, YEAH, THE PENTIUM.

17 Q. AND HOW IS THE CHIP ABLE TO DO THAT?

18 A. IT NOT ONLY HAS A RING OSCILLATOR CLOCKING A COMPUTER AS  
19 FAST AS IT CAN, IT HAS 144 RING OSCILLATORS COMPUTING, CLOCKING  
20 144 COMPUTERS AS FAST AS IT CAN.

21 Q. AND I ASSUME, THEN, IF IT HAS 144 COMPUTERS, ALL OF WHICH  
22 ARE BEING CLOCKED BY ITS OWN RING OSCILLATOR AS FAST AS THEY  
23 CAN, DOES THAT MEAN THAT IT CONSUMES POWER VERY QUICKLY?

24 A. ONE WOULD THINK SO, BUT IN FACT, NOT. IT CAN RUN 96,000  
25 MIPS WITH HALF A WATT OF POWER.

1 Q. AND WHY IS IT ABLE TO RUN SO EFFICIENTLY?

2 A. THAT'S MAGIC, I GUESS. FIRST, CAREFUL DESIGN TO MINIMIZE  
3 THE AMOUNT OF POWER EACH COMPUTER USES; AND SECOND, WE HAVE A  
4 RING OSCILLATOR RUNNING EACH OF THE COMPUTERS.

5 THAT MEANS WE DO NOT HAVE A MASTER CLOCK WHICH WOULD HAVE  
6 TO BE DISTRIBUTED TO 144 DIFFERENT PLACES WHICH WOULD BE VERY  
7 EXPENSIVE IN POWER.

8 Q. SO IN TERMS OF POWER CONSUMPTION, HOW WOULD YOU  
9 CHARACTERIZE THE GA144 COMPARED TO OTHER MICROPROCESSORS?

10 A. ONE OF OUR CUSTOMERS CONSTRUCTED A DIAGRAM SHOWING A  
11 COMPARISON OF SPEED VERSUS POWER OUT OF ALL CONTEMPORARY  
12 COMPUTERS -- THIS WAS A COUPLE YEARS AGO -- AND WE WERE RIGHT  
13 AT THE TOP OF THAT LIST.

14 WE USE LESS POWER AND GET MORE SPEED THAN ANY OTHER  
15 COMMERCIALY AVAILABLE COMPUTER.

16 Q. SO LET ME ASK YOU THIS: ARE ALL 144 MINI COMPUTERS ON THE  
17 GA144 RUNNING AT THE SAME TIME?

18 MS. KEEFE: OBJECTION, YOUR HONOR. I'VE BEEN QUITE,  
19 YOU KNOW, ALLOWING THE LIST TO GO ON WHITE A WHILE, BUT I  
20 OBJECT BECAUSE THERE'S NO RELEVANCE. THIS HAS NOTHING TO DO  
21 WITH THE PHONES OR CHIPS THAT ARE ACCUSED IN THIS CASE.

22 THE COURT: RESPONSE, MR. OTTESON?

23 MR. OTTESON: WELL, I THINK IT'S RELEVANT TO HIS  
24 BACKGROUND, AND ALSO THIS IS SOMETHING THAT PRACTICES THE  
25 INVENTION AS HE'S TESTIFYING TO NOW.

1 THE COURT: ALL RIGHT. I'LL OVERRULE THE OBJECTION.  
2 YOU MAY PROCEED.

3 MR. OTTESON: THANK YOU.

4 Q. SO I BELIEVE THE QUESTION WAS, ON THE GREENARRAYS CHIP,  
5 YOU'VE GOT 144 OF THESE MINI COMPUTERS. ARE ALL OF THOSE  
6 RUNNING ALL THE TIME? OR HOW DOES THAT WORK?

7 A. THEY CAN BE RUNNING ALL THE TIME. BUT WHAT HAPPENS  
8 TYPICALLY IS THE COMPUTER RUNS WHEN IT'S CALLED UPON TO, AND  
9 WHEN IT HAS NOTHING TO DO, IT STOPS. IT JUST IS IDLE, DRAWING  
10 NO POWER AT ALL.

11 SO THE MINIMUM POWER THE CHIP CAN USE IS 0 IF NONE OF THE  
12 COMPUTERS ARE RUNNING. IF ONE COMPUTER IS RUNNING, IT WILL USE  
13 4 MILLIAMPS. IF ALL THE COMPUTERS ARE RUNNING, IT'LL USE HALF  
14 A WATT. IT'S SELF-REGULATING IN THAT SENSE.

15 Q. SO WHAT ARE SOME OF THE POTENTIAL USES FOR A  
16 MICROPROCESSOR CHIP LIKE THE GREENARRAYS 144?

17 MS. KEEFE: I APOLOGIZE, YOUR HONOR. OBJECTION. AND  
18 MIGHT I ASK FOR A SIDE-BAR?

19 THE COURT: YOU MAY.

20 (SIDE-BAR DISCUSSION ON THE RECORD.)

21 THE COURT: TELL ME IF YOU HAVE ANY PROBLEMS HEARING.  
22 GO AHEAD.

23 MS. KEEFE: I APOLOGIZE, YOUR HONOR, BUT THERE WERE  
24 INTERROGATORIES AND DISCOVERY REQUESTS THROUGHOUT THIS ENTIRE  
25 CASE FOR ANYTHING THAT PRACTICES THE INVENTION AND GREENARRAYS



1 WAS NEVER MENTIONED AT ALL.

2 AND HE JUST TOLD YOU THAT THE RELEVANCE OF THIS WAS THAT  
3 THIS GREENARRAYS CHIP NOW SOMEHOW PRACTICES THE PATENT AND HE'S  
4 GOING TO TELL ALL ABOUT IT AND WHY HE THINKS IT DOES THAT.

5 IT'S A VIOLATION OF DISCOVERY. IT'S AN AMBUSH ON ME. I'M  
6 VERY PREJUDICED AT THIS POINT. I'VE HAD NO ABILITY TO DO ANY  
7 DISCOVERY ON THIS AND I THINK IT'S HIGHLY PREJUDICIAL AND NOT  
8 RELEVANT.

9 THE COURT: MR. OTTESON, GO AHEAD.

10 MR. OTTESON: CHUCK MOORE IS A THIRD PARTY. HE IS  
11 NOT MY CLIENT. HE -- THEY HAD EVERY OPPORTUNITY TO TAKE HIS  
12 DEPOSITION AND, IN FACT, THEY DID FOR TWO DAYS.

13 FOR THEM TO COME IN NOW AND SAY THAT HE CAN'T COME IN AND  
14 TALK ABOUT WHAT HE DOES IT AN OUTRAGEOUS OBJECTION. THERE'S NO  
15 BASIS FOR IT.

16 MS. KEEFE: BUT THEY NEVER SAID --

17 THE COURT: ALL RIGHT. I'M GOING TO ALLOW THE  
18 QUESTIONING TO CONTINUE.

19 HOWEVER, I WILL ENTERTAIN A REQUEST AT THE END OF THE DAY  
20 AND BEFORE TOMORROW, OR ANYTIME IN BETWEEN, FOR AN INSTRUCTION  
21 TO THE JURY STRIKING THIS TESTIMONY IF, IN FACT, IT WAS  
22 REQUESTED DURING DISCOVERY AND IT WAS NOT IDENTIFIED DURING  
23 DISCOVERY.

24 I DON'T WANT THIS TO BE CONTINUED DURING THIS TRIAL. I  
25 WANT TO KEEP THINGS MOVING ALONG, BUT I'LL ENTERTAIN THE

1 REQUEST.

2 MR. OTTESON, YOU MAY PROCEED, BUT YOU MUST BE AWARE  
3 THAT THAT'S THE OBJECTION.

4 LET'S PROCEED. LET'S PROCEED.

5 MR. OTTESON: THANK YOU, YOUR HONOR.

6 MS. KEEFE: THANK YOU, YOUR HONOR.

7 (SIDE-BAR DISCUSSION CONCLUDED.)

8 MR. OTTESON: YOUR HONOR, I WAS WONDERING IF WE MIGHT  
9 HAVE THE LAST QUESTION READ BACK, PLEASE?

10 THE COURT: YOU MAY.

11 MR. OTTESON: THANK YOU.

12 (THE RECORD WAS READ BY THE COURT REPORTER.)

13 THE WITNESS: IT'S APPROPRIATE FOR ANY APPLICATION IN  
14 WHICH YOU NEED A LOT OF COMPUTATION. IF YOU DON'T NEED 96,000  
15 MIPS OR IN THAT VICINITY, IT WOULD NOT BE APPROPRIATE.

16 BUT APPLICATIONS, SUCH AS CONTROL OF A ROBOT OR  
17 INTERPRETATION OF A CAMERA IMAGE OR CRYPTOGRAPHY, APPROPRIATE  
18 APPLICATIONS ABOUND.

19 BY MR. OTTESON:

20 Q. THANK YOU, MR. MOORE.

21 NOW, YOU'RE AWARE, ARE YOU NOT, SIR, THAT TPL AND PATRIOT  
22 ARE PARTIES IN THIS CASE?

23 A. YES.

24 Q. DO YOU HAVE A RELATIONSHIP WITH THEM?

25 A. YES.

1 Q. WHAT IS YOUR RELATIONSHIP WITH TPL AND PATRIOT?

2 A. THEY FORMED A JOINT VENTURE TO LICENSE AND EXPLOIT THESE  
3 PATENTS, AND I HAVE A CONTRACT WITH THAT VENTURE CALLED -- IT'S  
4 CALLED PDS TO PROVIDE SUPPORT FOR THEIR LICENSING EFFORTS.

5 Q. AND WHAT TYPES OF SUPPORT DO YOU PROVIDE FOR THE LICENSING  
6 EFFORTS OF TPL AND PATRIOT?

7 A. WHATEVER I CAN, WHENEVER THEY ASK ME TO DO. I'M HERE  
8 TODAY.

9 Q. NOW, LET ME ASK YOU THIS, MR. MOORE: WHEN A COMPANY  
10 PURCHASES A LICENSE TO THE '336 PATENT, DO YOU GET ANY OF THE  
11 PROCEEDS FROM THAT?

12 A. AS A CO-INVENTOR, I GET A PERCENTAGE OF THE ROYALTIES  
13 AFTER EXPENSES.

14 Q. OKAY. LET'S TAKE A LOOK AT EXHIBIT 245 IF WE COULD,  
15 PLEASE, WHICH IS THE -- A DOCUMENT WE'VE BEEN TALKING ABOUT.

16 CAN YOU TELL US WHAT THIS IS, EXHIBIT 245?

17 A. THAT'S THE FIRST PAGE OF THE '336 PATENT.

18 Q. ARE YOU FAMILIAR WITH THIS?

19 A. YES.

20 Q. AND WHY ARE YOU FAMILIAR WITH IT?

21 A. BECAUSE I HAVE READ IT MANY TIMES OVER THE LAST, OH, WHAT,  
22 15 YEARS IN SUPPORT OF VARIOUS LITIGATION EFFORTS.

23 Q. OKAY. SO IS THIS YOUR NAME HERE THAT APPEARS ON THE UPPER  
24 LEFT PART OF THIS PAGE THAT WE'RE LOOKING AT?

25 A. THAT'S RIGHT, CHARLES H. MOORE. AT THE TIME I LIVED IN

1 WOODSIDE.

2 Q. SO ARE YOU THEN AN INVENTOR OF THE '336 PATENT?

3 A. THAT'S RIGHT.

4 Q. AND WERE THE -- WERE THERE ANY CO-INVENTORS THAT YOU HAD  
5 ON THE '336?

6 A. RUSSELL FISH WAS THE CO-INVENTOR.

7 Q. NOW, LET ME ASK YOU THIS: IS THE '336 PATENT PART OF A  
8 GROUP OR WHAT WE MIGHT CALL A PORTFOLIO OF PATENTS?

9 A. YES, IT IS.

10 Q. AND WHAT IS -- WHAT IS THAT CALLED?

11 A. THAT'S TERMED MMP PORTFOLIO, THE MOORE MICROPROCESSOR  
12 PATENT PORTFOLIO.

13 Q. AND HOW DOES THE '336 PATENT FIT INTO THE MMP PORTFOLIO?

14 A. I THINK THAT PORTFOLIO HAS ABOUT SEVEN PATENTS. WE  
15 APPLIED FOR A PATENT, AS IT INDICATES THERE, IN AUGUST OF 1989  
16 AND THE PATENT OFFICE CAME BACK WITH AN OFFICE ACTION SAYING WE  
17 SHOULD BREAK IT UP INTO MULTIPLE PATENTS BECAUSE THERE WERE SO  
18 MANY IDEAS PRESENTED IN IT.

19 Q. OKAY. SO WHAT'S THE RELATIONSHIP BETWEEN THE '336 PATENT,  
20 THEN, AND THE ORIGINAL PATENT APPLICATION THAT YOU FILED BACK  
21 IN AUGUST OF 1989?

22 A. IT IS A PORTION OF THE ORIGINAL PATENT THAT DEALT WITH THE  
23 COMPUTER CLOCK.

24 Q. OKAY. SO HOW WOULD YOU GENERALLY DESCRIBE YOUR INVENTION  
25 IN THE '336 PATENT?

1 A. THE INVENTION IS THAT I PUT A RING OSCILLATOR ON THE SAME  
2 CHIP AS THE MICROPROCESSOR TO ACT AS A COMPUTER CLOCK; AND A  
3 SECOND CLOCK TO, TO INTERFACE WITH THE I/O INTERFACE.

4 IN OTHER WORDS, I -- INSTEAD OF ONE CLOCK, AS MOST  
5 COMPUTERS HAD, I HAD TWO CLOCKS THAT WERE INDEPENDENT.

6 Q. AND THE RING OSCILLATOR, WHICH PORTION OF THE  
7 MICROPROCESSOR WAS THE RING OSCILLATOR USED TO CLOCK?

8 A. IT CLOCKED THE CPU.

9 Q. WHAT IS A CPU?

10 A. IT'S THE CONTROLLING ELEMENT OF THE MICROPROCESSOR IN THE  
11 SAME SENSE AS THE MICROPROCESSOR IS THE CONTROLLING ELEMENT OF  
12 A COMPUTER.

13 Q. AND YOU MENTIONED THE TERM "CLOCK."

14 WHAT IS A CLOCK IN THE CONTEXT OF COMPUTERS?

15 A. A CLOCK IS A PERIODIC SIGNAL THAT IS USED TO DETERMINE  
16 WHEN AN INSTRUCTION BEGINS AND WHEN IT ENDS.

17 Q. NOW, I THINK YOU ALSO MENTIONED THE TERM "INPUT/OUTPUT  
18 INTERFACE."

19 WHAT IS AN INPUT/OUTPUT INTERFACE?

20 A. IT IS USED, FOR INSTANCE, TO COMMUNICATE WITH MEMORY.

21 MEMORY REQUIRES PRECISE TIMING SIGNALS WHICH WOULD BE  
22 INAPPROPRIATE FOR A RING OSCILLATOR TO GENERATE, SO THEY WOULD  
23 BE GENERATED BY A CRYSTAL CLOCK.

24 LIKEWISE IF YOU HAVE AN ETHERNET CONNECTION THAT REQUIRES  
25 A VERY PRECISE TIMING SIGNALS, OR A USB REQUIRES TIMING

1 SIGNALS. ALL THESE PERIPHERAL DEVICES REQUIRE THEIR OWN  
2 TIMING.

3 Q. OKAY. MAYBE WE CAN GO TO FIGURE 17 OF THE '336 PATENT AND  
4 YOU CAN TALK TO US ABOUT SOME OF THESE THINGS.

5 ACTUALLY, FIGURE 17, I THINK, IS REPRODUCED ON THE FRONT  
6 PAGE, BUT -- YEAH, LET'S JUST BLOW THAT UP.

7 SO MAYBE YOU CAN USE THIS DIAGRAM, MR. MOORE, WHICH IS ON  
8 THE COVER OF THE '336 PATENT TO TALK ABOUT SOME OF THE THINGS  
9 YOU WERE JUST TALKING ABOUT WITH RESPECT TO YOUR INVENTION.

10 A. YES. THERE IS THE RING OSCILLATOR WHICH GENERATES A  
11 TIMING SIGNAL THAT IS PASSED TO THE CPU.

12 THEN THERE'S A SECOND CLOCK, THE CRYSTAL CLOCK, WHICH  
13 GENERATES A MORE -- A CONSTANT, A STEADY TIMING SIGNAL TO THE  
14 I/O INTERFACE.

15 AND THAT IS -- THAT IS AN APPROPRIATE FREQUENCY FOR THE  
16 EXTERNAL MEMORY BUS, FOR OTHER PERIPHERALS WHICH ARE DRIVEN BY  
17 THE COMPUTER.

18 Q. OKAY. VERY GOOD.

19 COULD YOU PLEASE TALK TO US ABOUT WHAT IN THIS DIAGRAM  
20 THAT WE SEE ON THE COVER PAGE OF THE '336 PATENT, WHICH OF  
21 THESE COMPONENTS ARE ACTUALLY ON THE MICROPROCESSOR ITSELF?

22 A. EVERYTHING EXCEPT THE CRYSTAL CLOCK.

23 Q. OKAY. SO THE RING OSCILLATOR, THE CPU, AND THE I/O  
24 INTERFACE, ARE THOSE ALL ON THE SILICON CHIP?

25 A. YES, THEY ARE.

1 Q. OKAY. WHAT ABOUT -- THIS IS A REFERENCE TO AN EXTERNAL  
2 MEMORY BUS. WHERE IS THAT?

3 A. THAT GOES OFF CHIP THROUGH A NUMBER OF, OF PINS.

4 Q. OKAY. AND WHAT DOES THAT CONNECT TO?

5 A. THAT WOULD CONNECT TO MEMORY CHIPS.

6 Q. OKAY.

7 A. IN THE CASE OF OUR PROTOTYPE, I THINK EIGHT DIFFERENT  
8 MEMORY CHIPS.

9 Q. OKAY. BEFORE WE SPEND MORE TIME ON THE '336 PATENT, LET'S  
10 TALK A LITTLE BIT ABOUT YOUR BACKGROUND.

11 WHERE ARE YOU FROM ORIGINALLY, MR. MOORE?

12 A. I WAS BORN IN MCKEESPORT, PENNSYLVANIA, WHICH IS A STEEL  
13 TOWN JUST OUTSIDE OF PITTSBURGH, OR AT LEAST IT WAS WHEN I WAS  
14 BORN.

15 Q. AND DID YOU GROW UP IN MCKEESPORT?

16 A. NO. MY FATHER WORKED IN THE STEEL MILL WHEN HE WAS YOUNG,  
17 AND AS HE GREW OLDER, HE MOVED US TO ERIE, PENNSYLVANIA, AND  
18 THEN TO FLINT, MICHIGAN.

19 Q. SO WHERE DID YOU GO TO HIGH SCHOOL THEN?

20 A. I WENT TO FLINT CENTRAL HIGH SCHOOL, GRADUATED IN 1956.

21 Q. AND AFTER GRADUATING FROM HIGH SCHOOL, DID YOU GO TO  
22 COLLEGE AT SOME POINT?

23 A. I RECEIVED A NATIONAL MERIT SCHOLARSHIP TO ATTEND MIT IN  
24 1956, AND THAT WAS THE SECOND YEAR THAT NATIONAL MERIT  
25 SCHOLARSHIPS HAD BEEN OFFERED. THEY ARE STILL OFFERED TODAY.

1 Q. AND WHEN YOU WENT TO MIT, WHAT DID YOU STUDY THERE?

2 A. I WENT THERE EXPECTING TO STUDY CIVIL ENGINEERING, TO  
3 BUILD BRIDGES AND RAILROADS.

4 BUT I LEARNED ABOUT PHYSICS WHEN I GOT THERE AND DECIDED I  
5 WOULD BECOME A PHYSICIST, HIGH ENERGY PARTICLE PHYSICIST.

6 BUT IN THE COURSE OF DOING THAT, I DISCOVERED COMPUTERS  
7 AND FELL IN LOVE WITH THEM AND BECAME A COMPUTER ENGINEER.

8 MY DEGREE IS IN PHYSICS, BACHELOR'S IN PHYSICS.

9 Q. AND WHAT YEAR DID YOU GRADUATE FROM MIT WITH YOUR PHYSICS  
10 DEGREE?

11 A. 1960.

12 Q. NOW, WHILE YOU WERE EARNING YOUR BACHELOR'S DEGREE AT MIT,  
13 DID YOU HAVE ANY UNIQUE OR INTERESTING WORK EXPERIENCE?

14 A. I DID, INDEED. AS I WAS A SOPHOMORE IN 1957, THE SOVIET  
15 UNION LAUNCHED SPUTNIK, WHICH WAS THE FIRST EARTH ORBITING  
16 SATELLITE, AND JUST DOWN THE STREET FROM MIT AT SMITHSONIAN  
17 ASTROPHYSICAL OBSERVATORY, THEY HAD A -- THEY WERE ASSIGNED THE  
18 TASK OF TRACKING SUCH SATELLITES, AND THIS SATELLITE OCCURRED  
19 ABOUT A YEAR EARLIER THAN THEY EXPECTED, SO THEY WERE QUITE  
20 UNPREPARED TO TRACK IT.

21 AND, AMONG OTHER PEOPLE, I WAS HIRED TO RUN A DESK  
22 CALCULATOR AND CALCULATE THE ORBIT AND PREDICT WHERE YOU COULD,  
23 WHERE YOU COULD SEE THE SATELLITE.

24 Q. AND SO WHAT YEAR DID YOU START WORKING AT THE SMITHSONIAN  
25 ASTROPHYSICAL OBSERVATORY?



1 A. THAT WOULD BE JANUARY OF 1958.

2 Q. SO YOU SAID SOMETHING ABOUT USING A CALCULATOR IN YOUR  
3 WORK THERE. TELL US A LITTLE BIT MORE ABOUT THAT AND HOW THAT  
4 WENT.

5 A. CALCULATORS AT THE TIME, THESE WERE MECHANICAL  
6 CALCULATORS, THERE WERE TWO MAJOR KINDS, FRIDEN AND MARTIAN. I  
7 BELIEVE I USED THE MARTIAN CALCULATOR.

8 YOU PUSHED A LOT OF BUTTONS AND IT WAS ELECTRICALLY  
9 DRIVEN, SO YOU DIDN'T HAVE TO TURN A CRANK, AND YOU GOT NUMBERS  
10 OUT AND WROTE THEM ON SHEETS OF PAPER.

11 Q. AND DID YOU CONTINUE IN TERMS OF THE WORK THAT YOU WERE  
12 DOING FOR THE SMITHSONIAN ASTROPHYSICAL OBSERVATORY, DID YOU  
13 CONTINUE TO USE THAT OLD-FASHIONED CALCULATOR IN YOUR WORK?

14 A. NO. AFTER ABOUT A MONTH OF DOING THIS, I DISCOVERED THAT  
15 I COULD WRITE A FORTRAN PROGRAM THAT WOULD DO IT MUCH MORE  
16 EASILY.

17 Q. AND WHAT IS FORTRAN?

18 A. PARDON?

19 Q. WHAT IS FORTRAN?

20 A. FORTRAN IS THE FIRST COMPUTER LANGUAGE, THE FIRST HIGH  
21 LEVEL COMPUTER LANGUAGE THAT WAS DESIGNED.

22 Q. SO WHAT WAS -- WHAT COMPUTER DID YOU HAVE ACCESS TO THAT  
23 YOU COULD WRITE THIS FORTRAN PROGRAM FOR TO TRACK SPUTNIK?

24 A. THE SMITHSONIAN ARRANGED THAT I COULD USE THE COMPUTER  
25 WHICH HAD JUST BEEN INSTALLED AT MIT, WHICH WAS VERY

1 CONVENIENT. IT WAS A 704, AN IBM 704, WHICH WAS A VACUUM TUBE  
2 COMPUTER.

3 SO MY BACKGROUND IN COMPUTING GOES WAY, WAY BACK.

4 Q. SO HOW BIG WAS THIS IBM 704 COMPUTER?

5 A. ABOUT THE SIZE OF THIS ROOM.

6 Q. OKAY. AND WHO -- WHO HAD ACCESS TO THIS IBM 704 COMPUTER  
7 THAT YOU USED?

8 A. THERE WERE THOUSANDS OF STUDENTS AT MIT. I WAS VERY LUCKY  
9 TO GET ACCESS TO IT. MOSTLY IT WOULD HAVE BEEN PROFESSORS.  
10 THERE WERE NO COMMERCIAL APPLICATIONS.

11 I REMEMBER STANDING BY THE PRINTER WATCHING IT SPEW OUT  
12 PREDICTIONS, SIMULATIONS OF STELLAR INTERIORS. IT WAS  
13 SIMULATING THE LIFETIME OF A STAR, WHICH WAS A VERY EXCITING  
14 PLACE TO BE AND A TIME TO BE THERE.

15 Q. SO WHAT DID YOU USE THE IBM 704 TO DO IN YOUR JOB FOR  
16 SMITHSONIAN ASTROPHYSICAL OBSERVATORY?

17 A. I WOULD GENERATE WHAT ARE CALLED EPHEMERIS. THEY'RE LISTS  
18 OF PREDICTIONS OF WHEN VARIOUS TRACKING CAMERAS CAN SEE THE  
19 SATELLITE. THE SATELLITE HAD TO BE ILLUMINATED BY THE SUN, IT  
20 HAD TO BE ABOVE THE HORIZON, THE SKY IT TO BE CLEAR, BUT THAT  
21 WAS BEYOND MY CONTROL.

22 AND EVERY WEEK WE WOULD RUN A -- MAKE A COMPUTER RUN AND  
23 GENERATE A BUNCH OF PAPER, WHICH I THINK WOULD BE MAILED TO  
24 THE, TO THE TRACKING STATIONS. I DON'T THINK -- THERE WAS NO  
25 INTERNET, OF COURSE. I DON'T EVEN THINK THEY COULD TELETYPE

1 IT.

2 Q. DID YOU RECEIVE ANY RECOGNITION FOR YOUR WORK THAT YOU DID  
3 AT THE SMITHSONIAN ASTROPHYSICAL OBSERVATORY?

4 A. YES. I GOT A VERY NICE LETTER FROM THE ADMINISTRATION  
5 BECAUSE THEY HAD NOT PLANNED TO DO THIS. THEY HAD PLANS THAT  
6 WOULD MATURE IN ANOTHER YEAR TO DO THIS KIND OF THING, BUT I  
7 DID IT IN A MONTH AND GOT A HEAD START ON IT AND IT WAS A GOOD  
8 THING FOR ME TO HAVE DONE AND IT WAS NICE OF THEM TO  
9 ACKNOWLEDGE IT.

10 Q. SO --

11 A. I ALSO PUT MYSELF OUT OF A JOB.

12 Q. SO YOU SAID THAT YOU STARTED WORKING AT SAO, OR  
13 SMITHSONIAN ASTROPHYSICAL OBSERVATORY, BEFORE YOU GRADUATED  
14 FROM MIT.

15 HOW MUCH LONGER DID YOU WORK FOR SAO? DID YOU CONTINUE  
16 AFTER YOU GRADUATED?

17 A. YES, I BELIEVE I DID. I WORKED THERE FOR ANOTHER YEAR  
18 AFTER GRADUATING BEFORE MOVING ON TO STANFORD.

19 Q. AND TELL US ABOUT THAT, PLEASE.

20 A. I WAS WORKING ON A THESIS PROJECT AT MIT WHICH HAD TO DO  
21 WITH LAUNCHING THE GAMMA RAY TELESCOPE INTO ORBIT, AND THAT  
22 SATELLITE LAUNCH WAS DELAYED, SO I, I -- I WAS STUCK AT MIT  
23 WAITING FOR IT.

24 BUT THEN I DECIDED TO GO TO STANFORD AND STUDY  
25 MATHEMATICS. THERE WERE NO COMPUTER SCIENCE DEPARTMENTS AT THE

1 TIME, ALTHOUGH STANFORD STARTED ONE A COUPLE YEARS LATER.

2 AND I STUDIED MATHEMATICS GOING FOR A PH.D. FOR A COUPLE  
3 YEARS BEFORE I DECIDED THAT COMPUTERS WERE REALLY MORE FUN.

4 Q. AND WAS THERE ANYTHING ELSE, ANYTHING IN TERMS OF PROJECTS  
5 GOING ON AT STANFORD THAT YOU WORKED ON WHILE YOU WERE THERE  
6 BESIDES WORKING ON YOUR MATHEMATICS DEGREE?

7 A. THIS WAS 1961 AND THE STANFORD LINEAR ACCELERATOR WAS JUST  
8 BEING BUILT, AND SO I GOT A JOB PROGRAMMING ELECTRON BEAM  
9 STEERING FOR THE STANFORD ACCELERATOR.

10 Q. SO DID YOU ACTUALLY GET A PH.D. FROM STANFORD?

11 A. ALAS, NO. I -- I WAS DIVERTED.

12 Q. OKAY. SO WHAT WERE YOU DIVERTED TO NEXT AFTER STANFORD?

13 A. AFTER I LEFT STANFORD, I DID FREELANCE PROGRAMMING FOR A  
14 WHILE AND THEN GOT A JOB WITH THE NATIONAL RADIO ASTRONOMY  
15 OBSERVATORY PROGRAMMING RADIO TELESCOPES.

16 Q. AND WHERE WAS THE NATIONAL RADIO ASTRONOMY OBSERVATORY  
17 LOCATED? IN OTHER WORDS, WHERE DID YOU PHYSICALLY WORK?

18 A. THIS MEANT I HAD TO GO BACK TO CHARLOTTESVILLE, VIRGINIA,  
19 WHICH WAS THEIR HEADQUARTERS, BUT THEY HAD TELESCOPES IN GREEN  
20 BANKS, WEST VIRGINIA AND IN TUCSON, ARIZONA, WHICH I WOULD  
21 TRAVEL TO FROM TIME TO TIME.

22 Q. AND WHAT WAS THE NAME OF THE OBSERVATORY IN TUCSON?

23 A. IT WAS KITT PEAK. KITT PEAK OPTICAL OBSERVATORY WAS ON  
24 THIS MOUNTAIN, AS WELL AS A RADIO TELESCOPE FOR NRAO.

25 Q. SO WHAT DID YOU DO IN YOUR, IN YOUR JOB FOR THE NATIONAL

1 RADIO ASTRONOMY OBSERVATORY?

2 A. IN ORDER TO PROGRAM THE COMPUTERS IN THE WAY THAT I  
3 THOUGHT THEY SHOULD BE PROGRAMMED, I HAD TO INVENT A COMPUTER  
4 LANGUAGE.

5 Q. AND SO IS YOUR INVENTION OF A COMPUTER LANGUAGE SOMETHING  
6 THAT HAPPENED WHILE YOU WERE AT NRAO, OR WHEN DID THAT HAPPEN  
7 EXACTLY?

8 A. IT STARTED A YEAR OR TWO EARLIER, BUT THE FIRST REALLY  
9 PRACTICAL SYSTEMS WERE AT NRAO.

10 Q. SO WE'RE GOING TO GET TO YOUR COMPUTER LANGUAGE IN A  
11 MINUTE, BUT WHAT TYPES OF WORK WAS GOING ON AT NRAO THAT YOU  
12 WERE WORKING ON?

13 A. I WAS PROGRAMMING THE DATA ACQUISITION OF RADIO SIGNALS  
14 THAT HAD GONE THROUGH A FILTER BANK TO PRODUCE A SPECTRUM.

15 AND IN MICROWAVE RADIATION, THE MOST INTERESTING SPECTRA  
16 YOU GET ARE FROM MOLECULES THAT ARE IN INTERSTELLAR SPACE, AND  
17 THE MOST INTERESTING MOLECULES ARE ORGANIC MOLECULES WHICH HAVE  
18 SINCE BEEN RECOGNIZED TO BE PRECURSORS OF LIFE, THE SORT OF  
19 THINGS CONTAINED IN COMETS AND METEORS AND GAS CLOUDS, AND  
20 THAT'S ALMOST CERTAINLY INVOLVED IN THE EVOLUTION OF LIFE ON  
21 THIS PLANET.

22 Q. OKAY. SO LET'S GO BACK FOR A MINUTE THEN AND TELL US A  
23 LITTLE BIT ABOUT THIS PROGRAMMING LANGUAGE THAT YOU CAME UP  
24 WITH. WHAT WAS IT CALLED?

25 A. I CALLED IT FORTH, F-O-R-T-H. AND IT WAS DIFFERENT THAN

1 OTHER COMPUTER LANGUAGES. AT THE TIME I KNEW ABOUT COBOL AND  
2 FORTRAN AND ALGOL AND LISP, ALL THE CURRENT LANGUAGES, BUT I  
3 WAS NOT HAPPY WITH THEM, AND SO I DEvised ONE WHICH I THOUGHT  
4 WAS MUCH SIMPLER.

5 Q. SO WHAT WAS WRONG WITH THE OTHER PROGRAMMING LANGUAGES OF  
6 THAT TIME THAT WOULD MOTIVATE YOU TO COME UP WITH YOUR OWN  
7 LANGUAGE?

8 A. PARENTHESES. ESPECIALLY LISP WOULD HAVE NESTED  
9 PARENTHESES AD NAUSEAM, AND OTHER LANGUAGES PICKED UP ON THAT,  
10 AND C HAS CURLY BRACKETS INSTEAD OF JUST PARENTHESES, AND THE  
11 PUNCTUATION BECAME A NIGHTMARE.

12 THE COMPILERS WERE CLEVER, IF YOU THINK OF THIS AS BEING  
13 CLEVER. THEY COULD DETECT YOUR PUNCTUATION ERRORS AND TELL YOU  
14 ABOUT THEM, WHICH STRUCK ME AS STUPID.

15 SO I ELIMINATED THE PUNCTUATION AND ELIMINATED ALL THOSE  
16 OPPORTUNITIES TO MAKE ERRORS.

17 ON THE OTHER HAND, IT PUT COMPILER WRITERS OUT OF WORK  
18 BECAUSE THEY HAD NO ERROR CHECKING TO DO.

19 Q. SO WHAT WAS DIFFERENT ABOUT FORTH BESIDES THE FACT THAT IT  
20 DIDN'T HAVE PARENTHESES OR SOME OF THIS OTHER PUNCTUATION THAT  
21 WAS CAUSING PROBLEMS?

22 A. IT HAD TWO PUSH DOWN STACKS. MOST LANGUAGES ONLY HAD ONE  
23 PUSH DOWN STACK. SO THE FORTH LANGUAGE PRE -- IT PREVIEWED AN  
24 ARCHITECTURE FOR A COMPUTER THAT WOULD BE ESPECIALLY CONVENIENT  
25 AND EFFICIENT.

1 Q. SO WITHOUT MAKING US ALL INTO FORTH PROGRAMMERS AND  
2 TEACHING US WHAT PUSH DOWN STACKS ARE, WHAT WERE THE GENERAL  
3 BENEFITS OF FORTH FROM YOUR PERSPECTIVE THAT YOU, THAT YOU  
4 ACHIEVED BY CREATING FORTH AS OPPOSED TO OTHER LANGUAGES?

5 A. A FORTH PROGRAM CAN HAVE 1 PERCENT THE NUMBER OF  
6 INSTRUCTIONS THAT A C PROGRAM HAS, AND IN GENERAL, THE SPEED OF  
7 A PROGRAM DEPENDS UPON THE NUMBER OF INSTRUCTIONS. SO A FORTH  
8 PROGRAM CAN RUN MUCH FASTER THAN A C PROGRAM.

9 IT USES LESS MEMORY. IT CAN RUN ON SMALLER COMPUTERS. IT  
10 TAKES LESS ENERGY. ADVANTAGE AFTER ADVANTAGE AFTER ADVANTAGE.

11 AND MANY PEOPLE APPRECIATED THIS, ALTHOUGH THOUSANDS  
12 DIDN'T.

13 THE COURT: MR. OTTESON, I'M GOING TO NEED TO STOP  
14 YOU THERE. WE HAVE REACHED THE END OF OUR TRIAL DAY.

15 LADIES AND GENTLEMEN OF THE JURY, I WANT TO THANK YOU FOR  
16 YOUR SERVICE TODAY. IF I COULD GIVE YOU JUST A COUPLE OF  
17 FURTHER INSTRUCTIONS BEFORE I LET YOU GO HOME.

18 THE FIRST IS THAT, AS I'VE ALREADY MENTIONED, YOU ARE NOT  
19 TO DISCUSS THIS CASE WHILE WE'RE OUT ON BREAK, AND IT'S  
20 PARTICULARLY IMPORTANT AT THE END OF A TRIAL DAY TO KEEP SOME  
21 FURTHER IDEAS IN MIND.

22 THE FIRST IS THAT UNDOUBTEDLY YOUR SPOUSE, YOUR KIDS, YOUR  
23 PARTNER, YOUR FRIENDS ARE GOING TO WONDER, WHAT HAPPENED TODAY  
24 IN COURT? AND ALL I CAN TELL YOU TO SAY TO THEM IN RESPONSE IS  
25 "NOTHING THAT I CAN TALK ABOUT."

1           AND THE SECOND IDEA I WANT TO LEAVE YOU WITH IS THIS:  
2           SOMETIMES FOLKS FIND IT KIND OF DIFFICULT TO TELL PEOPLE THAT  
3           THEY'RE CLOSE TO THAT THEY CAN'T TALK ABOUT THE WORK THAT  
4           THEY'VE JUST SPENT DOING DURING THE DAY. WELL, I HAVE AN EASY  
5           SOLUTION FOR YOU THERE. TELL THEM I MADE YOU SAY NOTHING.  
6           BLAME IT ON ME. I'LL TAKE THE FALL FOR THAT, OKAY?

7           AS I MENTIONED EARLIER, YOU ARE TO RETURN HERE TOMORROW  
8           MORNING AT 9:00 O'CLOCK READY TO GO. WE ARE LIKELY TO BEGIN AT  
9           9:30, BUT IF IT TURNS OUT THAT THE COURT HAS NO FURTHER  
10          BUSINESS WITH THE LAWYERS ALONE, WE'LL START AS SOON AS ALL OF  
11          YOU ARE ASSEMBLED.

12          WITH THAT, I'LL WISH YOU A GOOD EVENING. WE'LL SEE YOU  
13          BACK HERE AT 9:00 O'CLOCK TOMORROW MORNING IN THE JURY ROOM.

14          (JURY OUT AT 4:31 P.M.)

15          THE COURT: MR. MOORE, YOU MAY STEP DOWN, SIR.

16          PLEASE BE SEATED. COUNSEL, DO WE HAVE ANY ISSUES TO  
17          ADDRESS BEFORE WE CALL IT A DAY?

18          MR. OTTESON: I DON'T BELIEVE WE DO FROM OUR SIDE,  
19          JUDGE.

20          MS. KEEFE: NONE THAT I CAN THINK OF YET, YOUR HONOR.

21          THE COURT: OKAY. THEN I WILL SEE YOU ALL BACK HERE  
22          READY TO GO AT 9:00.

23          JUST LET MR. RIVERA KNOW WHEN YOU'RE READY AND WE'LL DEAL  
24          WITH ANY ISSUES THAT COME UP OVER THE EVENING.

25          MR. OTTESON: THANK YOU, YOUR HONOR.



1 MS. KEEFE: THANK YOU, YOUR HONOR.

2 OH, YOUR HONOR, I APOLOGIZE. DID YOU INVOKE THE RULE  
3 REGARDING WITNESSES AND WHO THEY CAN TALK TO ONCE THEY'RE ON  
4 THE STAND?

5 THE COURT: I DIDN'T HEAR ANY SUCH REQUEST, BUT I'LL  
6 CERTAINLY ENTERTAIN ONE NOW IF YOU WANT TO MAKE THAT REQUEST.

7 MS. KEEFE: I WOULD LIKE TO MAKE THAT REQUEST. GIVEN  
8 THE FACT THAT MR. MOORE IS IN THE MIDDLE OF HIS TESTIMONY, IT  
9 DOESN'T SEEM APPROPRIATE THAT HE'S TALKING TO ANYONE FROM  
10 OPPOSING COUNSEL.

11 THE COURT: CAN I TAKE IT THAT YOUR REQUEST WOULD  
12 APPLY TO ANY AND ALL WITNESSES THAT MIGHT FOLLOW?

13 MS. KEEFE: ABSOLUTELY.

14 THE COURT: MR. OTTESON, ANY OBJECTION?

15 MR. OTTESON: NO OBJECTION, JUDGE.

16 THE COURT: ALL RIGHT. WITH THAT, MR. MOORE, I WILL  
17 GIVE YOU THE SPECIFIC ADMONITION THAT YOU REMAIN UNDER OATH,  
18 AND BECAUSE YOU ARE UNDER OATH, YOU ARE NOT TO DISCUSS YOUR  
19 TESTIMONY WITH ANYONE.

20 WE'LL SEE YOU BACK HERE TOMORROW MORNING AND MR. OTTESON  
21 CAN YOU HIS NEXT QUESTION. ALL RIGHT, SIR?

22 THE WITNESS: YES, YOUR HONOR.

23 THE COURT: ALL RIGHT. THANK YOU. HAVE A GOOD  
24 EVENING.

25 MS. KEEFE: THANK YOU.

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MR. OTTESON: THANK YOU, YOUR HONOR.

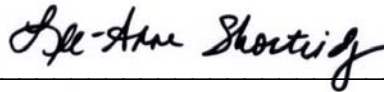
MS. KEEFE: THANK YOU, YOUR HONOR.

(WHEREUPON, THE EVENING RECESS WAS TAKEN.)

CERTIFICATE OF REPORTER

I, THE UNDERSIGNED OFFICIAL COURT REPORTER OF THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF CALIFORNIA, 280 SOUTH FIRST STREET, SAN JOSE, CALIFORNIA, DO HEREBY CERTIFY:

THAT THE FOREGOING TRANSCRIPT, CERTIFICATE INCLUSIVE, IS A CORRECT TRANSCRIPT FROM THE RECORD OF PROCEEDINGS IN THE ABOVE-ENTITLED MATTER.



LEE-ANNE SHORTRIDGE, CSR, CRR  
CERTIFICATE NUMBER 9595

DATED: SEPTEMBER 23, 2013